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The Relationship Between Student Participation Rates in Texas Public School Extracurricular Activity Programs and Related Factors of Academic Achievement, Attendance, Drop Outs and Discipline

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The Relationship Between Student Participation Rates in Texas Public School Extracurricular Activity Programs and Related Factors of Academic Achievement, Attendance, Drop Outs and Discipline

by

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The Relationship Between Student Participation Rates in Texas Public School Extracurricular Activity Programs and Related Factors of Academic Achievement, Attendance, Drop Outs and Discipline

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Supporters of public education must point out positive aspects of the school program. One such aspect is the extracurricular activity program. Research points to the benefits students who participate in extracurricular activities gain in reference to academic achievement and other school related environmental factors (absences, dropouts, discipline referrals) (Greer, 1975; Hanks and Eckland, 1976; Joekel, 1985; NFHS, 1999). However, other existing research points to the fact that an over emphasis on school extracurricular activity programs, can negatively impact student and school

performance on certain academic indicators (Coleman, 1961; Meier, 1999; Miracle, 1994).

Today, widespread budget cuts have weakened and eliminated some extracurricular and co-curricular programs, which may carry hope and direction for students. By decreasing the number and quality of such programs, schools are also losing avenues that may help direct students/participants away from gang and other negative personal and social behavior. By cutting these programs, one of the most important means of socializing our youth and improving school environments is slipping away.

The study investigated the following research questions:

What is the relationship between the overall participation rate, athletic participation rate and non-athletic participation rate in Texas public school extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between school size and overall participation rate, athletic participation rate and non-athletic participation rate in Texas public school extracurricular activity programs?

In total, the findings of this study provide support for the notion that participation in extracurricular activities can have positive implications not only for student success academically, but also for school success as a whole. In reference to the participation rates (overall, athletic and non-athletic) in the school extracurricular activity program and their relationships to academic achievement, attendance, dropouts and discipline, it is clear from the data that schools with higher participation rates in extracurricular activities

have statistically significant differences in their performance on the tested variables. In reference to school size, the data indicate that as the size of the school increases the rate of participation in extracurricular activities (overall, athletic and non-athletic) decreases at a statistically significant rate.

Table of Contents

CHAPTER ONE

INTRODUCTION

Over the years there has been much discussion on the topic of 'what ends should schools serve?' From the Colonial times when schools were designed to produce church and religious leaders to the factory model of schools that became prevalent during the Industrial Revolution, the ends of schools have been determined by those in power. Where does that leave us today? No longer are schools simply needed to create religious leaders or to produce workers with the ability to follow orders and work in a factory. Today, schools have a much larger responsibility and are becoming much more of a socializing agent. More than at any point in history the Latin term 'in loco parentis' describes the role of the school in providing more than just the three R's made popular in the early years of public schooling.

Issues such as school discipline, drop outs, absenteeism, academic achievement gaps and standardized test scores face school administrators, teachers and coaches on a daily basis. Managing the range of problems and challenges of each day and what programs are implemented at each campus to assist in this endeavor is an area that is ripe for study. Some believe that the school should be interested in providing each student with the skills necessary to get a job and contribute to society in a positive manner. Others believe that schools have the responsibility to do more, including providing students with instruction in social skills in elementary school and providing varied vocational education at the high school level (Lee, 1983). The thoughts on what services

schools should be offering to students are too varied and numerous to capture so the focus of this study will be on the issues of school size, student participation in the school extracurricular activity program, academic achievement, school attendance, school dropouts and school discipline referrals.

Now more than ever, students attending schools that are considered dangerous or which are presumed to have a negative school environment are at the forefront of political and social agendas. President Bush has made a national goal out of ensuring schools are held accountable not only for test scores, but also for campus crime and discipline (Houston Chronicle, 2003). Schools across America and specifically in Texas are continuing to address the issue of the school drop out problem and the definition of exactly what constitutes a drop out. Issues that may lead to problems for students and also to negative school environmental factors could include: tardiness, chronic absenteeism, truancy, suspensions and expulsions, retention, socioeconomic status, minority status, disability status, mobility, negative family interactions, behavior problems, academic problems, sense of alienation and disengagement from school, and poor peer acceptance (Barton, Watkins, & Jarjoura, 1997; Cairns, Cairns, & Neckerman, 1989; Eckstrom, Goertz, Pollack, & Rock, 1986; Kortering, Hess, & Braziel, 1997; Sinclair, Christenson, Evelo, & Hurley, 1998).

School activity programs were a concern of professionals studying public education during the 1980's. When the National Commission on Excellence in Education released A Nation at Risk (1983, p.5) in 1983, it detailed to the population that the country and its educational institutions seemed to have "lost sight of the basic purposes of

schooling, and of the high expectations and disciplined effort needed to attain them". According to Green (1987), almost every state carried out some type of educational reform following A Nation at Risk. Texas was no exception. In fact, Texas was among the first states to mandate that students participating in extracurricular activities meet stringent academic eligibility requirements (NASBE, 1999).

In 1983, the Texas Legislature created the Select Committee on Public Education (SCOPE). The Select Committee issued a number of recommendations in early 1984 that were designed to improve the quality of public schools in Texas. In the area of student performance and discipline, the committee recommended initiating rules concerning eligibility and participation in extracurricular activities. Specifically, the committee proposed what would soon be known as the 'No Pass No Play' rule.

According to the 'No Pass No Play' provision, any student with a grade below a seventy on a scale of a hundred, in any class for one grade reporting period, would be prohibited from participating in extracurricular activities for the following six week grading period (House Bill 72, 1984). Prior to the 1984-1985 school year, a student retained eligibility for extracurricular activities for an entire semester by passing at least three courses during the preceding semester. In addition, a grade below sixty-five, not seventy, was failing and would affect eligibility for extracurricular activities. Other items included in HB 72 were limits on practice and performance in extracurricular activities.

Extracurricular activity programs are outside the normal curriculum of the school. As such, discussion concerning the positive or negative effects of a good program abounds. Existing research points to the benefits students who participate in

extracurricular activities gain in reference to academic achievement and other school related functions (absences, dropouts, discipline referrals) (Greer, 1975; Hanks and Eckland, 1976; Joekel, 1985; NFHS, 1999). A widely held belief of those involved in education (parents, teachers and administrators) is that extracurricular activity participation prepares individuals for future success in society. Students, through participation in athletics, are assumed to learn many valuable traits that are integral to their success in school and in their future endeavors. Some of these learned characteristics include sacrifice for the common good, striving for excellence, following directions, working with others, and most importantly, to be self-disciplined (Braddock, 1980).

Conversely, other existing research points to the fact that the more school districts spend on their extracurricular activity budget, the worse the school performs on certain academic indicators (Coleman, 1961; Meier, 1999; Miracle, 1994;). Research (Silberman, 1970, Coleman, 1961) has found a detrimental effect of participation in extracurricular activities in relation to academic achievement. Additionally, there is the contention that while athletics may have positive effects on academic achievement that there is no valid evidence that participation in sports causes any verifiable socialization effects (Stevenson, 1975).

More research in the area of what can make a school or student better able to achieve is badly needed. Public schooling and its associated programs continue to be a target of legislatures and courts across the nation. School success factors, student achievement and the benefits of participation in extracurricular activities are all aspects of

a successful student experience. With the ongoing discussions concerning the failings of public education in the Legislature, this research on programs that may be working in the schools is appropriate. By outlining programs and activities, which contribute to positive school environmental factors and student academic achievement, school administrators and coaches can implement programs specifically tailored to those school and student success variables.

Statement of the Problem

Public education is under attack. Supporters must point out positive aspects of the public education program. A positive school environment, with low numbers of dropouts and discipline referrals and high achieving, successful students, can lead to positive opinions with the public. Concern about disorder in school has increased in recent years, with some research indicating increased use of metal detectors, locker searches and employment of private security personnel (Welsh, 2001). At the same time, however, a growing number of schools have implemented programs, including school resource officers, character education and school/community collaborations which have dramatically improved school environments in a number of areas (McCurdy, Manella and Eldridge, 2003; Inside School Safety, 2001 and 2003). Planning for safety is a systematic process to create and maintain a place where students can learn and teachers can teach in a warm and welcoming environment free of intimidation and fear (Clarkson and Pelton, 2002).

A not so new aspect to this situation is the school extracurricular activity program. Research points to the benefits students who participate in extracurricular activities gain

in reference to academic achievement and other school related functions (absences, dropouts, discipline referrals) (Greer, 1975; Hanks and Eckland, 1976; Joekel, 1985; NFHS, 1999). A widely held belief of those involved in education (parents, teachers and administrators) is that extracurricular activity participation prepares individuals for future success in society. Students, through participation in extracurricular activities, are assumed to learn many valuable traits that are integral to their success in school and in their future endeavors. Some of these learned characteristics include sacrifice for the common good, striving for excellence, following directions, working with others, and most importantly, to be self-disciplined (Braddock, 1980). Research studies have consistently shown that participation in student activities is beneficial to students. In the last decade, extracurricular activities have been expressly linked to the concept of school success. If schools are to be measures for success in terms of the social side of education, the measures must be obtained from the schools extracurricular activities program (Christensen, 1984).

In 1966, Coleman observed that if it were not for interscholastic athletics, or something like it, the rebellion against the school, the rate of dropout, and the delinquency of boys would be worse than they presently were. Today, widespread budget cuts have weakened and eliminated some extracurricular and co-curricular programs, which carry hope and direction for students. By decreasing the number and quality of such programs, schools are also losing avenues that may help direct students/participants away from gang and other negative personal and social behavior. By cutting these

programs, one of the most important means of socializing our youth and improving school environments is slipping away.

Research Questions

What is the relationship between the overall participation rate in Texas public school extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between the participation rate in Texas public school athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between the participation rate in Texas public school non-athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between school size and overall participation rate in Texas public school extracurricular activity programs?

What is the relationship between school size and participation rate in Texas public school athletic extracurricular activity programs?

What is the relationship between school size and participation rate in Texas public school non-athletic extracurricular activity programs?

Definitions

Advanced Course Completions - the percent of 9^{th}-12^{th} graders completing and receiving credit for at least one advanced course.

Academic Excellence Indicator System (AEIS) - The Academic Excellence Indicator System (AEIS) pulls together a wide range of information on the performance of students in each school and district in Texas every year. The performance indicators include: State-administered assessment performance; State Developed Alternative Assessment performance; Student Success Initiative; attendance rate for the full year; dropout rate (by year); completion and dropout rates (4-year longitudinal); percent of high school students completing an advanced course; percent of graduates completing the Recommended High School Program; Advanced Placement (AP) and International Baccalaureate (IB) examination results; TAAS / TASP equivalency rate; and SAT and ACT examination -- participation and results (Source: TEA website).

Athletic Extracurricular Activity Participation Rate – the number of participants reported in the school athletic extracurricular activity program as a percentage of the total enrollment in grades 9-12 of the school.

Attendance Rate – the total number of days, summed for all students, that students were present in the prior school year divided by the total number of days students were in membership during that school year (Source: TEA website).

Discipline Referral Rate - The number of referrals for student discipline divided by the total number of students in membership during that school year (Source: TEA website).

Drop Out Rate – The total number of students reported as dropouts during the prior school year in grades 7–12 expressed as a percent of the total number of students in attendance at any time during that school year in grades 7–12. The TEA deletes from the count any student who was erroneously reported as a dropout, such as students who are

found to be enrolled in another district, reported as graduates by another district, or students who have received their General Educational Development (GED) certificate (Source: TEA website).

Extracurricular Activity - any activity reported under the programs of interscholastic competition by the Texas University Interscholastic League Constitution and Contest Rules, section 380.

Mean ACT Score – The average of the ACT composite scores (an average of English, mathematics, reading, and science reasoning portions of the ACT) was created by summing the composite scores and dividing by the number of ACT examinees. Composite scores for the ACT range from 1 to 36 (Source: TEA website).

Mean SAT Score - The average SAT score was developed by taking the sum of the mathematics and verbal SAT I scores for all students divided by the number of examinees. Total scores for the SAT I range from 400 to 1600 (Source: TEA website).

No Pass No Play - a portion of House Bill 72 passed by the Texas Legislature in 1983 pertaining to academic eligibility standards for students who participate in extracurricular activities. No Pass No Play was revised by Senate Bill 1 in 1995.

Non-athletic Extracurricular Activity Participation Rate – the number of participants reported in the school non-athletic extracurricular activity program as a percentage of the total enrollment in grades 9-12 of the school.

Overall Extracurricular Activity Participation Rate – the number of overall participants reported in the school extracurricular activity programs reported as a ratio of the total enrollment in grades 9-12 of the school.

Percent of graduates completing the Recommended or Distinguished Achievement High School Program – number of total graduates meeting or exceeding requirements for the RHSP and Distinguished Achievement Program as a percentage of the number of students graduating (Source: TEA website).

Percent Passing all sections of the TAKS Exam - The total number of students who passed all the TAKS tests they attempted expressed as a percentage of the total number of students who took one or more tests. (Source: TEA website).

Public Education Information Management System (PEIMS) - In compliance with the Texas Education Code, (PEIMS) contains only the data necessary for the legislature and the Texas Education Agency (TEA) to perform their legally authorized functions in overseeing public education. PEIMS encompasses all data requested and received by TEA about public education, including student demographic and academic performance, personnel, financial, and organizational information (Source: TEA website).

School Size – the number of students enrolled in grades 9-12 as reported to the University Interscholastic League for Reclassification and Realignment purposes.

Assumptions and Limitations

The major assumption of this paper is that participation in extracurricular activities can be a positive influence on the factors researched in this study. As indicated in the literature review to follow, there is a substantial base on which to build this assumption. Additionally, an assumption of the paper is that accurate participation figures in extracurricular activity programs, overall and specifically for both athletic and non-athletic activities can be obtained from school administrators who are present in the

school on a daily basis.

The limitations of this study include the fact that it only includes a sample of Texas high schools. As such, generalization of the study to states other than Texas is not possible.

Significance Statement

The selection of the topic was driven by the researcher's day to day involvement with school district personnel, school activity programs and the research concluding that the most significant factor in predicting success in high school aged students for their college career and later life is the amount of participation in school activities (Klesse, 1994). If participating in school activities does in fact have positive benefits for those who take part, then it is the responsibility of researchers to conduct research on the various items associated with school environmental factors which may influence or be influenced by the rate of student participation in the school extracurricular activity program.

The significance of this study consists of the potential for researchers, policy makers and school leaders to determine how best to integrate the extracurricular activity program into the overall school program. If the information is available to help schools and students become more successful, then an obligation exists for school personnel to use this knowledge to devise a plan of action to implement such programs.

Organization of the Study

The presentation of this study will take form in five chapters. Chapter one consists of an introduction to the study and background information on the topic areas of which it consists. Also included in chapter one is the statement of the problem, definition of pertinent terms and the questions leading the direction of the study. Chapter two is a review of related literature including the historical development of school extracurricular activity programs, factors influencing student participation or non-participation and the reported benefits and negatives associated with participation in extracurricular activity programs. Further, the review will include information concerning school discipline, student drop out rates, absenteeism, academic achievement and other issues relating to the overall school environment**.**

The methodology and research design are included in chapter three. Additionally, chapter three will include the participants in the study as well as the procedures utilized to select those participants. Chapter four outlines the data collected for this study. And lastly, chapter five summarizes the findings of the study and outlines areas for further potential research.

CHAPTER TWO

REVIEW OF LITERATURE

Introduction

The importance of extracurricular activities may be as old as formal education itself. Year after year, issues surrounding the school environment continue to be addressed by policy makers and school administrators as all work to ensure order in the school and the success of the millions of school age students. This chapter provides a review of the literature to explain the source and nature of the issues surrounding these aspects of the overall school program. The literature provides the framework from which the rest of the study can be viewed. Tracing the history and development of these important aspects of the school program provides a base from which policy makers, school administrators and other researchers can draw when making decisions on how to implement positive change in schools

The review will contain the history of the development of extracurricular activity programs from their infancy in Greek culture to the current offering of programs in today's schooling system. Additionally, factors influencing a student's decision to participate or not participate are addressed. Lastly, this section also provides a summary of various research studies conducted on the role of participation in extracurricular activities in relation to various aspects of student and school success, both positive and negative.

Following the discussion of the development and current values of the school extracurricular activity program, the chapter closes with a review of the literature relating to the factors of school disciplinary issues, dropouts and absenteeism and academic achievement.

History of Extracurricular Activity Programs

The importance of extracurricular activities may be as old as formal education itself. References to the elements of activities outside of academics may be traced to the ancient Greek culture. Their academic program was supplemented with such activities as music, drama, journalism and athletics. Plato advocated a program of gymnastics and swimming, on a compulsory basis, for all children (boys and girls) because of the great value he saw in these activities (Lee, 1983). Other Greek writers were aware of the benefits of physical education as well. In his writings on education, Aristotle provides a description of an education system he feels will produce the good man and citizen:

> We must distinguish the different parts of the soul- the part which has rational principle and the part which has simply the capacity for obeying such a principle. We must also distinguish the different parts or aspects of life- action and leisure; war and peace. Education must regard all the different parts of the soul and the different parts or aspects of life. States in the past, e.g. Sparta, have tended to concentrate on only one aspect of the soul and one aspect of life:…….States, however, like individuals, should

> devote themselves in the main to the aspect of life which is concerned with peace and leisure. (Aristotle, in Howie 1968, p. 65)

With their limited knowledge of anatomy and physiology the extent of the Greeks knowledge of the benefits of physical education and the varied program of physical education they advocated is surprising (Lee, 1983).

Throughout history, the value of extracurricular activities has been in and out of favor. The power of the church in Europe restricted the development of activities in schools for many centuries. During the Renaissance, certain activities grew and developed outside of the academic program (Lee, 1983). One of the greatest of the Enlightenment era writers and philosophers was John Locke, who also spoke of the benefits of activity in the education of children. In his Thoughts Concerning Education, Locke describes a happy state in life in terms of a sound mind and a sound body. Throughout his writing in the area of education, Locke points out the benefits and necessity for educating all parts of the child and gives a detailed description of things parents should do to ensure their children grow up to be good and healthy citizens. Locke specifically mentions swimming as an activity that should be taught to all children: 'Tis that saves many a man's life; and the Romans thought it so necessary, that they ranked it with letters; and it was common phrase to mark one ill-educated, and good for nothing, that he had neither learnt to read or swim (Locke, 1902 p.46).' Further evidence about the importance of exercise and activity for Locke comes from his assertion that all children and adults should pay due care to keeping the body in strength and vigor so that it will be

able to obey and execute the orders of the mind. While Locke advocated a program that included dancing, fencing and horsemanship, other writers of the era, such as Rosseau went further and called for instruction in 'swimming, leaping and jumping and scaling cliffs.' Rosseau describes utilizing continued exercise to develop wise, robust and reasonable men (Lee, 1983).

Rosseau also writes that gymnastic exercises and games with outdoor activities should be part of a physical education program. A follower of Rosseau was the first to make physical education a part of the school program. With the opening of his Philanthropinum in Dessau, Germany, Johann Basedow was the first to make gymnastics or any other physical education activity a part of the school curriculum. Others did not follow the example set by Basedow and the experiment lasted only a few years (Quick, 1912).

Physical education in America began in its infancy during the 18th century. Among the chief advocates of physical education at this time were Benjamin Franklin and Thomas Jefferson. In most accounts, it is obvious that the physical education needs of students during this time had no place in the realm of education. Franklin, however, was an advocate for physical education activities and recommended that these activities be recognized in the schools. Not only was Franklin interested in the kind of school and curriculum needed for the youth of America, but he went as far as to offer detailed instructions and advice on how to set up physical activity programs in the schools and often gave instruction on the techniques of teaching some of these activities (McKenzie, 1936).

Thomas Jefferson was also an early proponent of activity programs in the schools. In his writings on education he expressed his thoughts that physical exercise was an integral part of the total educational program. Included in his plans for the University of Virginia, was the design for a gymnasium. While the influence of these two great figures in American history was great in many areas, there would be a gradual shift in the beliefs of most educators on this topic (Lee, 1983).

It was during the nineteenth century when Americans began to generally accept the belief that physical education was necessary for the proper growth of children. With this belief came the idea that schools were responsible for the physical and intellectual education of youth and that physical education had a place in the school curriculum. There were those who continued to resist the implementation of these programs. These groups felt that manual labor was sufficient exercise. These beliefs were influenced by the Puritan idea of play as sin and others who felt that while play may not be a sin, it was certainly a waste of valuable time (Lee, 1983).

It should be noted here that much like education in general, girls were restricted from participation in these physical education programs. However, in the schools specifically for girls, dance was one of the subjects that were advertised. Most were limited to dancing because the leaders at this time felt that was all the physical education these ladies would need. Emma Willard, an education leader for women at this time set the tone for these programs when she described exercise as needful to the health, recreation, cheerfulness and contentment of youth (Lutz, 1929). As early as 1821, girls schools in Massachusetts, New York and Connecticut were encouraging play for its

educational and recreational value as well as requiring periods of exercise for girls during the school day (Lee, 1983).

After a period of growth during the first half of the nineteenth century, physical education/ extracurricular activity programs and education in general suffered a setback during the Civil War. This was a result of the focus on introducing military training into the schools. This held true until the 1870's when education leaders took up the fight again for physical education activities versus military training in the schools. Dudley Sargent, then head of the Physical Education Department of Yale University led the fight for activities against the military training valued by most principals at the time (Sargent, 1927).

The last twenty years of the nineteenth century saw a great expansion in the number and variety of physical education programs across the nation. Not only were more gymnasiums being built at schools, schools were calling for teachers who were professionals in the area of physical education and could guide these programs. A new idea of activity programs began to take shape at this time and gain momentum going into the 20th century. Part of this change had to do with interscholastic competition. However, the majority of organized activities in school during the majority of the nineteenth century was intramural. It was only during the last decade of the nineteenth century that schools began to compete against each other. These activities were largely pupil inspired, pupil controlled and pupil coached occurring mostly in the schools of the smaller towns where there were no physical education teachers (Lee, 1983).

It was not until early in the Twentieth Century that the development of extracurricular activities programs began to flourish. Even though activities were gaining in popularity, they were not without their opponents, who regarded such activities as an interference with true school activities (Johnston, 1952). In the history of activities, the cornerstone for modern times was laid with the publication of the Cardinal Principles of Education. Written in 1918 by the Commission on the Reorganization of Secondary Education, the seven principles set the stage for the development of a wide range of educational opportunities for students. Included in the Principles were the elements of activities that respond to the health, ethical character, civic education, and worthy use of leisure time by pupils (NEA, 1919).

In the 1920's, most high schools had some sort of extracurricular activity program, and the general feeling among educators was that their programs were of educational value (Smith & McQuigg, 1965). Throughout World War II activities flourished, and there were even criticisms that schools offered too much in the way of activities to the detriment of the academic programs. Critics cited instances of aggressive and excessive use of activity programs (Robbins & Williams, 1969). During this time, many activities became a part of school electives programs, and efforts were made to return the balance of extracurricular activities to a more equitable level (Robbins & Williams, 1969).

School activity programs were a concern of professionals studying public education during the 1980's. When the National Commission on Excellence in Education released A Nation at Risk (1983, p.5) in 1983, it detailed to the population that the

country and its educational institutions seemed to have "lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to attain them". According to Green (1987), almost every state carried out some type of educational reform following A Nation at Risk. Texas was no exception. In fact, Texas was among the first states to mandate that students participating in extracurricular activities meet stringent academic eligibility requirements (NASBE, 1999).

Factors Influencing Participation

Fretwell indicates that any study of participation in extracurricular activities contains two surprises. The first is the large number of activities in which a few students participate, and the second is the large number of students who do not participate in activities (Fretwell, 1931).

Little did Fretwell know that in 1931 he would be describing the same serious problem that occurred in the 1980's. As schools become larger and larger, with funding limits forcing some schools to grow beyond the size that earlier convention determined to be a "large" school, activities programs have great difficulty overcoming the problem of numbers of students versus numbers of activities.

A problem related to student participation and the disparity of activity compared to pupil ratio is other modern sociological phenomena that contribute to nonparticipation. There has been extensive research undertaken to determine the reasons for this nonparticipation in activities. Major reasons cited related to the number of activities offered, availability of these activities, and the importance of pupils having jobs (Anderson, 1941, in Frank, 1983). Other reasons for nonparticipation centered on the

schools' ability to provide adequate activities with advisors who were committed to making the extracurricular programs work (Kilzer, Stephenson, and Nordberg, 1956; Spears, 1950).

Ronald Gholson surveyed approximately 2500 students, 2000 sponsors, and 1,000 school administrators during the spring of 1975. About three in four students described themselves as "somewhat" or "very active" in extracurricular programs. When students were asked the best way to establish status and acceptance among peers in their schools, 56 percent marked participation in student activities, as opposed to 19 percent who chose "earning high grades". These were followed by "driving a car to school" (10 percent), or by "not participating in student activities" (three percent). Nearly one-third of the students surveyed considered the activity programs more important than coursework in their educational pursuits. The reported reasons for student nonparticipation in extracurricular activities were:

Jobs outside of school–59%

Activities scheduled after school–84%

Irrelevant activities–83%

Not being selected for activity–77% (Gholson, 1979).

Gholson found from his study that school administrators perceive commitment of both sponsors and students to the activity program as deficient. To these administrators, lack of participation by students represents a greater problem than too much participation (Gholson, 1979).

A shortcoming of activities programs may also be illustrated in the findings of a

study sponsored by the National Association of Secondary School Principals, which indicated that high schools met only the needs of the academically average males, highly academic females, extremely creative students and minority students. Significantly lacking were the needs of the low ability students (Long, Buser and Jackson, 1977).

The reasons for nonparticipation, as well as the different values placed on extracurricular activities between adults and students, differ markedly. Adults praise the virtues of social participation, cooperative work groups, the joy of participation and the balance of academics and activities in the quest to educate the whole child. Students, on the other hand, report that they mainly participate to avoid boredom, to gain social acceptance from their peers, personal achievement and to respond to peer pressure. Consistent with different values relating to extracurricular activities, the concept of student socialization differs in the minds of the researcher and the student. As Garbarino (1978) reports, adults tend to see that the main business of socialization is the training of infants, children, and adolescents (sometimes adults) so that they can ultimately fulfill the social obligation that the society and culture will place upon them. This idea of socialization of adulthood implies that the adolescent needs to be involved in activities which elicit adult-like behaviors because these activities demand responsibility and accountability (Garbarino, 1978).

The fact that the perceived purposes differ, however, has no effect on the results. Activities can fulfill two opposite, distinct purposes while still providing social opportunity and education for students.

Benefits of Participation in Extracurricular Activities - Academic

A widely held belief of those involved in education (parents, teachers and administrators) is that extracurricular activity participation prepares individuals for future success in society. Students, through participation in athletics, are assumed to learn many valuable traits that are integral to their success in school and in their future endeavors. Some of these learned characteristics include sacrifice for the common good, striving for excellence, following directions, working with others, and most importantly, to be self-disciplined (Braddock, 1980).

The Role of Sports in Youth Development, Carnegie Corporation, New York, in a report of a meeting in March 1996, found that evidence showed that the involvement of young people in sports produces multiple benefits for them. At their best, sports programs promote responsible social behaviors and greater academic success, confidence in ones physical abilities, an appreciation of personal health and fitness, and strong social bonds with individuals and institutions. Teachers attribute these results to the discipline and work ethic that sports require.

Adolescent Time Use, Risky Behavior, and Outcomes: An Analysis of National Data, issued in September 1995, by the Department of Health and Human Services found that students who spend no time in extracurricular activities are 57 percent more likely to have dropped out of school by the time they would have been seniors; 49 percent more likely to have used drugs; 37 percent more likely to have become teen parents; 35 percent more likely to have smoked cigarettes; and 27 percent more likely to have been arrested than those who spend one to four hours per week in extracurricular activities.

Research conducted in 1991 by Skip Dane of Hardiness Research, Casper, Wyoming, revealed the following about participation in high school sports: 1) By a 2-to-1 ratio, boys who participate in sports do better in school, do not drop out and have a better chance to get through college. 2) The ratio for girls who participate in sports and do well in school is three to one. 3) About 92 percent of sports participants do not use drugs. 4) School athletes are more self-assured. 5) Sports participants take average and above-average classes. 6) Sports participants receive above-average grades and do above average on skills tests. 7) Those involved in sports have knowledge of and use financial aid and have a chance to finish college. 8) Student-athletes appear to have more parental involvement than other students. 9) Students involved in athletics appear to change focus from cars and money to life accomplishments during the process (NFHS, 1999).

A 1989 nationwide study by the Women's Sport Foundation indicated that athletes do better in the classroom, are more involved in school activity programs and stay involved in the community after graduation. The study also revealed that high school athletic participation has a positive educational and social impact on many minority and female students. The study, based on an analysis of data collected by the U.S. Department of Education's High School and Beyond Study, indicated that: 1) Girls receive as many benefits from sports as boys. 2) The "dumb jock" stereotype is a myth. 3) Sports involvement was significantly related to a lower dropout rate in some school settings. 4) Minority athletes are more socially involved than non-athletes (NFHS, 1999).

Research studies have consistently shown that participation in student activities is beneficial to students. In the last decade, extracurricular activities have been expressly

linked to the concept of school success. If schools are to be measures for success in terms of the social side of education, the measures must be obtained from the schools extracurricular activities program (Christensen, 1984).

Aside from attempts to 'curricularize' activities, the student activities program is the only forum where the social aspects of school success are addressed. Curran states that activities are just as much a part of the schools curriculum as are formal courses. Furthermore, they can contribute significantly to the total school climate (Curran 1983). If this is indeed the case, the depth and breadth of student activities programs in schools are very important to the whole concept of school success.

Benefits of Participation in Extracurricular Activities - Social

An important value in extracurricular activities is their support of positive student social relations. Many researchers support extracurricular activities in schools because they provide opportunities for healthy peer interactions and vital social experiences (Greer, 1975). Hanks and Eckland (1976) reported that students are exposed to a network of social relations in extracurricular activities that help bind the students to the school, and to its normative structure. This interaction helps to facilitate the development of student knowledge; self-confidence, interpersonal skills and resources that help make goals come to fruition (Hanks & Eckland, 1976).

Experiences in participatory roles are essential for effective socialization to adulthood and for orderly social relations (Garbarino, 1978). Fretwell (1931) discusses the responsibility to educate the whole student, with the most favorable opportunities for citizenship development to be found on the football field. He suggests an emphasis on

extending opportunities for athletics to all students rather than concentrating on the intensive coaching of a few (Fretwell, 1931). Joekel writes that student activities programs are an integral part of education. He states that they should operate in harmony with other parts of the total curriculum by providing significant learning experiences for youth and helping them develop values (Joekel, 1985).

Benefits of Participation in Extracurricular Activities - Democracy

School sports, more than other school activities, promote and reinforce the principles of the United States Constitution and our democratic way of life. No other single type of activity brings together people from completely different social, economic, political, religious, and racial backgrounds to participate in common, directly or indirectly, as school sports and other co-curricular activities. Activities are freely chosen by students; students are not required to participate as they are required to do in the classroom (Jeziorsky, 1994).

The simultaneous pursuit of individual and mutual improvement in school sports participation and other co-curricular activities is the embodiment of the dual principle of the United States Constitution. The vision of a democratic society is one in which individuals have a chance to better themselves but not to the detriment of the group. The symbolic ideal of collateral growth of individuals (players) and the community (sports team or other co-curricular group) is constantly reenacted by sport group participants (Jeziorsky, 1994).

Shortfalls of Extracurricular Activities

Even without affecting class attendance, athletics can influence student performance on basic skills exams. Students, for example, must pass classes to participate in athletics. Research reveals that the relationship between athletic expenditures and student performance on the TAAS is negative. Although the relationship is not large, it supports the position of those who argue that athletics detract from the basic academic mission of the public schools. All other things being equal, athletic budgets can have a maximum impact of approximately 4 percentage points on the TAAS. While this is not an exceptionally large impact, the TAAS measures basic skills and is the performance indicator least likely to be affected by a focus on athletics. After all, students who fail the TAAS are not likely to be eligible to participate in athletic activities (Meier, 1999).

Research (Silberman, 1970, Coleman, 1961) has found a detrimental effect of participation in extracurricular activities in relation to academic achievement. Additionally, there is the contention that while athletics may have positive effects on academic achievement that there is little to no valid evidence that participation in athletic activities causes any verifiable effects on socialization (Stevenson, 1975).

The writings of Coleman reveal two avenues of thought in regard to the value of participation in extracurricular activities. While acknowledging the importance of activities, he also raises the concern about the importance it takes on in relation to academic achievement. This dichotomy has had an interesting effect on those who choose to frame research from Coleman's perspective. Coleman seems to value activities, however, his analysis contains the premise of an adolescent goal of gaining popularity

among other students (Coleman, 1961). This desire is best met through participation in social activities and athletics. Coleman presumes that this value is incompatible with the academic orientation of schools.

Those who doubt the value of participation in extracurricular activities subscribe to the dumb jock theory of athletics. The dumb jock theory holds that participation extracurricular athletics activities detracts from the academic mission of the school and the academic achievement of the participant (Miracle, 1994).

Academic Eligibility Requirements and Extracurricular Activity Benefits

The issue of academic standards is central to the belief in the benefits of participation in extracurricular activities. Data gathered from a study following the implementation of 'No Pass No Play' provisions in Arizona found that participants studied in the Mesa Unified School District: had increased GPA's, had lower first year ineligibility rates, did not receive easier grades from teachers, and did not take less advanced or honors courses (O'Reily, 1992).

In Austin, research on the 'No Pass No Play' effects on academic factors revealed that students overall did fail fewer classes under the new rule. Additionally, the drop in failure rates was greater for those who participated in extracurricular activities. It was reported that students agreed that the rule encouraged them to make better grades and the students did not enroll in honors courses less (Ligon, 1988).

The priorities of successful extracurricular activity programs include promoting responsible social behaviors and greater academic success, confidence in ones physical

and mental abilities and strong bonds with individuals and institutions. Proponents of academic eligibility requirements argue that the highest priorities of students and schools should be academics and that 'No Pass No Play' regulations act as a deterrent to those who may be inclined to ignore their scholastic obligations (NASBE, 1999).

Advocates of academic eligibility requirements see academics as so important that extracurricular activity participation should be used as leverage and motivation to make sure students are academically successful and try harder (Frith and Clark, 1984).

Court systems have also weighed in on the issue. The Montana Supreme court found that policies such as 'No Pass No Play' are 'rationally related' to the legitimate interest of the state in pursuing increased academic performance of school children. Supporters of the regulations in this case contended that tougher standards for extracurricular activity eligibility are an impetus to motivate students to achieve better grades and to make the necessary sacrifices to maintain eligibility (Jurenas, 1987).

Even those who do not fully support the benefits of extracurricular activity participation theory see academic eligibility requirements as a positive for the academic achievement. Individuals effected by 'No Pass No Play' policies should not only work to improve their grades, but may also reevaluate their priorities and understand that academics must come first (Burnett, 2001). As many have come to recognize the importance of extracurricular activities in social, physical and personal development to them it seems ironic that policies and procedures have been developed that deny students the opportunity to participate. However, without academic eligibility standards the priorities of the school are misaligned. Academic standards lend credence to the belief

that the prime mission of the school is to teach academic skills first. Academic standards must be the students and the schools highest priority and eligibility rules act as a deterrent to those who may be inclined to ignore their class work for secondary priorities.

Other Factors

School factors such as discipline, dropouts and/or non-attendance and academic achievement are found in varying degrees at schools across America. Under the continuing focus of state and national governments, schools are continually searching for the right answer to address the concerns of parents, teachers and students. The following section will address those issues and provide some actions schools have taken to ensure safety and success in their schools.

Standard measures of school environmental factors consist of surveys of students, parents, staff, and sometimes community members regarding what they think about the school. They include judgments about issues such as teacher-student relationships, security and maintenance, administration, student academic orientation, and student behavioral values (Kelly et. al., 1986). For youth to fulfill their potential in school, schools should be safe and secure places for all students, teachers, and staff members. Without a safe learning environment, teachers may have difficulty teaching and students may have difficulty learning.

Disciplinary Issues

In 1999–2000, one out of every five public school students reportedly experienced one or more serious violent crimes. Seventy one percent of schools reported at least one

violent incident. Forty-six percent of public schools reported property crimes, or thefts (DeVoe, et. al., 2003). Other reports have discussed the causes for school violence and interventions that were perceived to have been successful in addressing school violence. The five items that were rated as most important included: disrespect for authority, lack of parent support/ involvement, poor anger management skills, disrespect for peers and lack of academic interest. The five interventions rated as most important for reducing disruptive and violent behavior included: parent contact, phone calls or conferences, punishment or consequences, teaching problem solving skills and after-school programs, sports or clubs (Hunt, et. al, 2002).

Theft and violence associated with schooling can lead to a disruptive and threatening environment, physical injury, and emotional stress and has been reported to be a negative influence to student achievement (Elliott, Hamburg, and Williams 1998). The present level of concern in reference to school crime is as high as ever as recent reports of violent crimes occurring in schools have shocked the nation. Nearly fifty percent of all parents surveyed in the fall of 1999 said they feared for their children's safety at school. Citizens expect schools to maintain safe and orderly environments conducive to learning and positive social development (Gottfredson and Gottfredson, 2001).

To illustrate this point Gottfredson and Gottfredson (2001) reported that during the last two decades at least two dozen reviews on prevention of school related violence have been published (Botvin, 1990; Botvin, Schinke, & Orlandi, 1995; Catalano, Arthur, Hawkins, Berglund, & Olson, 1998; Dryfoos, 1990; Durlak, 1995; Ennett, Tobler,

Ringwalt, & Flewelling, 1994; Gerstein & Green, 1993; D. C. Gottfredson, 1997, 2001; D. C. Gottfredson, Wilson, & Najaka, in press; Hansen, 1992; Hansen & O'Malley, 1996; Hawkins, Arthur, & Catalano, 1995; Hawkins, Farrington, & Catalano, 1998; Institute of Medicine, 1994; Lipsey, 1992; Lipsey & Derzon, 1998; Lipsey & Wilson, 1993; Norman & Turner, 1993; Samples & Aber, 1998; Stage & Quiroz, 1997; Tobler, 1992; Tobler & Stratton, 1997; Tremblay & Craig, 1995).

Reports such as those listed above have led to the development and identification of programs designed to lessen and prevent school-related violence and disruptions. Successful components identified as part of a comprehensive approach to violence prevention in schools include prevention education, early identification and intervention for students at risk for having difficulty and effective responses once inappropriate behavior has occurred (Peterson and Skiba, 2001). Programs inside the school are not the only approaches school administrators have implemented to respond to the growing concerns of stakeholders. These programs are not only designed to prevent school violence but also to improve student responses to conflict situations. These programs include parent and community involvement, character education, violence-prevention, conflict-resolution suggestions, peer mediation and bullying prevention (Peterson and Skiba, 2001).

In this area schools have worked to provide proactive guidance for students to learn the positive behaviors and values that should be a part of the education of all people. Such programs strive to provide knowledge about violence and conflict, to increase students' understanding of their own and others' feelings, and to teach students

the personal and interpersonal skills necessary to avoid violence. Programs such as these are based on concepts that are not especially new. Indeed, such concepts date back to philosophers such as Kant and to educators such as Dewey, who published his book Moral Principles in Education in 1909 (Henley, Ramsey, & Algozzine, 1999). "A successful school, like a successful business, is a cohesive community of shared values, beliefs, rituals and ceremonies. The community celebrates its saga by telling the stories of heroes and heroines who embody the core values of the community (Brendtro, Brokenleg, & Van Bockern, 1990, p. 31)."

It is becoming increasingly evident that when young people feel cared for and attached to their school and feel like a part of their school, they are less likely to use substances, engage in violence, or involve themselves in disruptive school behavior. As an example, a classroom management program that was designed to increase school connectedness and promoted self-discipline found that after one year, 30%-100% fewer students received discipline referrals for acting out in class, fighting, or assault (McNeely, Nonnemaker and Blum, 2002).

In recent times, it seems that discipline has become synonymous with zero tolerance. Zero tolerance policies punish all misbehavior severely in order to send a message to potential troublemakers. School suspension is in fact the most commonly used form of school discipline (Skiba & Knesting, 2002), and the use of suspension and expulsion has increased substantially since the advent of zero tolerance (Brooks, Schiraldi, & Ziedenberg, 2000). With this standard, it seems that discipline involves the use of punishment, most often school exclusion, to enforce the established standards of

the school discipline codes. A number of school factors also contribute to rates of school suspension. Wu et al. (1982) reported that school characteristics, such as overall suspension rate, teacher attitudes, administrative centralization, quality of school governance, teacher perception of student achievement, and racial makeup of the school appear to be more strongly predictive of school suspension than student attitudes and behavior.

There are students who come into the classroom with perceptions and beliefs that have grown out of their experience that may leave them less capable of recognizing and responding to the typical social curriculum and discipline codes of schools. The literature in the field of conduct disorders illustrates how this process might operate. According to Skiba and Peterson (2003, pg. 68),

> First, children who display noncompliant, aggressive, or antisocial behavior are often the victims of coercive interchanges in their family that have taught them that the most effective way to avoid abuse is to become increasingly abusive themselves. Second, in the face of extreme parental inconsistency, some children learn to act out to establish the limits, even if it means exposing themselves to harsh punishment. Third, perhaps as a result of unsafe or threatening home and community conditions, children with conduct disorders develop an antisocial cognitive set, striking first and asking questions later.

> Finally, well-documented links between antisocial behavior and academic underachievement suggest that, as the difficulty of academic material increases, students with behavior problems will turn to off-task and disruptive behavior in order to escape from academic demands.

There is also information that illustrates the number of disciplinary actions taken by school principals for reasons not related to academics. About 54 percent of public schools reported taking a serious disciplinary action in the 1999–2000 school year. Of those disciplinary actions, 83 percent were suspensions lasting five days or more, 11 percent were removals with no services (i.e., expulsions), and seven percent were transfers to specialized schools (DeVoe, et. al., 2003).

Drop Outs and Non Attendance

Two important factors in the success of any educational system are the rates at which young people drop out of or complete high school each year (USDOE, 2003). Student effort and devotion to their studies and the choices they make as a progression through their schooling years contribute to their academic success or lack thereof. Students' attendance, interest, and attention to their studies affect how well they perform at each level and could be a determinant factor in their school completion. Levels of student effort can be illustrated by how often students are absent from school, how interested they are in their schoolwork, whether they try to do their best, whether they complete their assignments, and how much time they spend on homework and other activities such as work or watching television (Wirt, et. al., 2002).

A sense of belonging to school can be directly related to dropping out of school. Additionally, it has been reported that students, who are identified as at-risk, whose teachers emphasize a sense of belonging in their classrooms and schools tended to accept those values and remain in school (Ma, 2003). According to a report issued in "Psychology in the Schools", in 2002 various factors can influence a student's decision to not complete school. Items that were viewed as particularly important issues with an influence on whether children drop out of school were parental support/supervision at home, school attendance, role models, gang involvement, and self-esteem. In the same report, prevention activities which were successful for dropouts were reported as increasing motivation, notifying parents of a late or absent students, providing emotional support, and a lower student/teacher ratio.

For the 2000–01 school year, the US Department of Education released a report indicating that the 9th- through 12th-grade dropout rate across the nation ranged from 2.2 percent in North Dakota to 10.9 percent in Arizona. Twenty-six of the forty-five reporting states in the DOE study had dropout rates ranging from four to seven percent. Across all reporting states the median dropout rate of was approximately four percent (USDOE, 2003). Across ethnicities, "dropout rates were generally lowest for White, non-Hispanic and Asian/Pacific Islander students and highest for American Indian/Alaska Native; Black, non- Hispanic; and Hispanic students in reporting states (USDOE, 2003, p. 6)."

The Hispanic population has the highest drop out rate, followed closely by other ethnically diverse student populations. Students who earn low grades, who don't

participate in school activities, who have poor attendance, and who receive little support and encouragement to stay in school are at a greater risk of dropping out. Additionally, being bored with school also was a major reason for the decision to leave school before graduation (Brooks, 1989).

Frequent truancy is also an indicator of potential schooling problems. Truants typically show little connection with school, exhibit low academic motivation, and consequently show poor school performance (Hallfors, et. al., 2002). Further, it has been suggested that the problems of drop out, absenteeism and truancy, disruptive classroom behavior, and delinquency can all be seen as outcomes of an early pattern of withdrawal from school (Finn, 1989).

Research (Reid, (1985, 1986, 1987, 1988), 1999; O'Keefe *et al*., 1993) indicates that some schools have disproportionately high levels of truancy and other forms of absenteeism. In some cases, these problems have persisted despite the programs implemented by local school administrations. In order to combat truancy and absenteeism within some schools, it may be necessary to change pupils, parents and teachers' attitudes towards these schools and the process of schooling (Reid, 2003). Higher truancy rates are also associated with lower self-concepts, single parent homes, lower grade expectations, less parent involvement in their education, lower socioeconomic status and lower levels of participation in extracurricular activities (McCall, 1994).

Academic Achievement

A significant relationship exists between poor achievement in students' beginning educational careers and later poor achievement (Nichols, 2003). Students who struggled

on standardized exams early in their schooling were potentially the same students who failed to meet standards later in high school. Nichols (2003) also found that there was a similar relationship when yearly grade point averages were explored, beginning in the sixth grade for most students. Students who earned low grade point averages, early in their schooling, continued to struggle academically. In most of those cases, the grade point averages continued to decline resulting in academic struggles throughout high school.

Another predictor of academic failure was seen among the poorest students (designated by eligibility for free or reduced price lunch). Low socioeconomic status students in many cases constitute more than half of all failing students and students who failed to meet both Math and English requirements on state mandated tests (Nichols 2003). Another avenue for schools to raise test scores and improve academic achievement is to ensure that students are happy, healthy, cared for, and drug-free. The schools that make the biggest gains in standardized-test scores tend to have low rates of substance abuse and violence, high percentages of students who exercised regularly and ate right, and school climates described as caring (Viadero, 2003).

Notwithstanding current popularity of testing in conjunction with the No Child Left Behind educational reform package, there are questions surrounding how long the current standards and testing movement will last and if the current movement will contribute significantly to higher student achievement and accountability. Fullan and his colleagues (Fullan & Hargreaves, 1996; Fullan & Stiegelbauer, 1991) have even argued that because of the limitations of norm-referenced tests, local districts should develop

their own standards and assessments that are more closely aligned with local objectives, goals and performance standards.

Study results (Wentzel, 1989) showed that academic achievement in high school students, as evidenced by grade point average (GPA), had a positive relationship to psychosocial factors such as the students' motivation to reach goals and efforts to perform well. Additionally, Brady, Tucker, Harris, and Tribble's (1992) findings suggested that grades were significantly influenced by factors outside of the student's skills and behaviors. Finn and Rock (1997) concluded that factors ranging from good self esteem and a sense of control in African American and Hispanic students helped to facilitate their learning and that, despite adversity, other personal qualities might help to explain a student's academic success or lack thereof.

Other studies in academic achievement point out additional factors that could be related to school success and student academic achievement. Numerous studies (Schulenberg, et. al., 1994; Taylor-Seehafer and Rew, 2000; Resnick, et. al., 1997; Bonny et. al., 2000) have demonstrated links between academic achievement, young people's attachment to school, and health behavior. Young people who feel more connected to school and earn higher grades are less likely to smoke cigarettes, use drugs, have an early sexual debut, be involved in violence, and be emotionally distressed than their less connected and less successful peers.

How schools deal with the achievement gaps between students is also a concern. Cooney and her colleagues provided steps for schools to follow in attempting to close such achievement gaps in their 2002 article for Education Digest, those included:

Providing an academic core aligned with rigorous content and performance standards; Believing that all students matter; Setting high expectations and providing extra help and time; Engaging students in learning; Making it possible for teachers to work together; Involving parents in supporting higher achievement; Using data to improve school and classroom practices; and Being a strong leader.

The above introduction and review of the background and issues surrounding the school extracurricular activity program and other school factors lay the groundwork from which the rest of the study is drawn. Policy makers and other researchers can draw from the information presented in the Literature Review as a base for further research into these important aspects of the overall school program. With the expected growth in the number of students in the public school system in the coming years, this information on vital components of the schooling system is crucial; especially in reference to the programs which have a demonstrated positive affect on the students who take part.

CHAPTER THREE

METHODOLOGY

This study utilizes the quantitative method of inquiry. Quantitative methods play an equally important role in knowledge building, and have done so throughout the history of contemporary social science (Rubin & Babbie, 1993). Quantitative research applies statistical procedures to answer questions about similarities, differences, and relationships among variables (Rubin & Babbie, 1993). This correlational study was designed to discover the relationship between the participation rates in Texas public school extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline. Correlational methodology permits the researcher to investigate the relationships among several variables in a single study (Borg & Gall, 1983). Correlational studies also serve a useful purpose in determining the relationship among measures and if deemed necessary by the researcher, suggesting possible causality (Tuckman, 1988).

Several variables were studied to ascertain if any or all have a relationship with the other in evaluating the overall school program in relation to factors and rate of student participation in school extracurricular activity programs. The selected variables used for the study include factors of academic achievement, attendance, dropouts, discipline and rate of student participation in the school extracurricular activity program. Another comparison includes the influence of school size on student participation rates. For purposes of this study, the participation rate in the school extracurricular program of the

school will be independent variables. The dependent variables will consist of the factors of drop out rate, attendance rate, discipline referrals and academic achievement information (percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven) as reported by the AEIS program of the Texas Education Agency. All responses and collected information were recorded into Statistical Package for the Social Sciences *(SPSS)* Version 11.0 for Mac OS X.

Population and Sample

The population of this study includes Texas high schools that hold membership in the University Interscholastic League (UIL). The UIL divides these schools by size into five classifications based on student enrollment in grades nine (9) through twelve (12) (see Table 1). The sample for this study will include all member schools of the University Interscholastic League. By using all member schools, the study provides an opportunity to provide detailed information that can be used by all schools and interested parties.

Table 1 - UIL Population

UIL Classification	Total in Population	Student Population Range
A	353	Up to 189
AA	223	190 to 389
AAA	186	390 to 899
AAAA	220	900 to 1924
AAAAA	245	1925 and Larger
Total	**1227**	

Again, the sample for this study will all member schools of the UIL. For this study, the population size is 1,227. The procedures for the study were carried out in six steps: (1) review of the literature, (2) development of the data collection vehicle, (3) identification of the population and sample, (4) collection of the data, (5) analysis of the data, and (6) reporting of the conclusions.

Data Collection

Data for this study were collected in two stages. After the sample of schools was created, the first stage consisted of the researcher sending a data collection vehicle to the selected schools. This vehicle was designed to provide the researcher with the overall participation figures in the school extracurricular activity program. Additionally, data will be gathered to determine the specific participation figures in the athletic and non-athletic

extracurricular activity programs. Participation Rate is defined as the number of overall participants in the high school athletic and/or non-athletic extracurricular activities as a ratio/percentage of the total enrollment in grades 9-12 of the school in question. For example an enrollment in grades 9-12 of 100 students with 50 participants in the non-athletic extracurricular activity program would result in a 50% participation rate for the non-athletic extracurricular activity program. For purposes of the study, extracurricular activities are divided into athletic and non-athletic activities. Athletic extracurricular activities include football, basketball, volleyball, etc. Non-athletic activities include music, drama and academic competition. These questionnaires were mailed to the principal of the selected school and asked them to provide the requested information and return to the researcher for tabulation.

The second stage of data collection consisted of the researcher gathering school related information from the Texas Education Agency AEIS and PEIMS databases. Information gathered from these sources included students performance on the state assessment examination; percentage of students taking advanced courses; percentage of students in the recommended or distinguished achievement graduation plans; mean SAT score for students; mean ACT score for students; drop out rate for each school; attendance rate for each school; number of discipline placements reported for each school and number of students eligible for participation in the federal free and reduced lunch program.

Data Analysis

The data were collected and analyzed in terms of relationships among variables in

the study. As indicated earlier, the independent variables are overall participation rates in the school extracurricular activity program and specifically for both athletic and non-athletic. Also, school size will be an independent variable in relation to certain research questions. The dependent variables for the study are the factors of drop out rate, attendance rate, discipline placements, and academic achievement based on student performance on state mandated examinations; percentage of students taking advanced courses; percentage of students in the recommended or distinguished achievement graduation plans; mean SAT score for students; and mean ACT score for students. Both correlation and regression techniques were used. The use of correlational statistics through analysis of variance and multiple regression allowed for the independent variable to correlate the relationship to the criterion referenced dependent variable. The analysis of the data were obtained through the SPSS package of statistical design and research version 11.0 for Mac OS X.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

Introduction

The aim of this study was to investigate the relationship between participation rates in school extracurricular activity programs and academic achievement, attendance, dropouts and discipline. The specific factors analyzed in this study include: school size, participation rates in extracurricular activities, participation rates in athletic extracurricular activities, participation rates in non-athletic extracurricular activities, academic achievement (percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven), attendance, dropouts and discipline.

The study addresses the following research questions:

What is the relationship between the overall participation rate in Texas public school extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between the participation rate in Texas public school athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between the participation rate in Texas public school non-athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between school size and overall participation rate in Texas public school extracurricular activity programs?

What is the relationship between school size and participation rate in Texas public school athletic extracurricular activity programs?

What is the relationship between school size and participation rate in Texas public school non-athletic extracurricular activity programs?

The data for this survey were collected from a number of sources. Information on participation numbers in school extracurricular activity programs was collected by a survey sent to the principals of member high schools of the University Interscholastic League (UIL). School size, as determined by number of students enrolled in grades 9-12, was based on information released from the UIL as part of the biannual process of Reclassification and Realignment of schools effective for the 2004-2006 school years. Factors associated with academic achievement (percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven), attendance, dropouts and discipline were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) as defined earlier in Chapter III. All responses and

collected information were recorded into Statistical Package for the Social Sciences *(SPSS)* Version 11.0 for Mac OS X.

Overview

UIL Member Schools

Table 2 below summarizes the number of member schools in the University Interscholastic League (UIL). As indicated in Chapter III and above, the UIL classifies schools based on the number of students enrolled in grades nine through twelve. The smallest schools are placed in Conference A and the largest schools are placed in conference AAAAA.

Table 2 - UIL Classification/ School Size

Conference	Frequency	Valid Percent	Cumulative Percent
A	353	28.8	28.8
AA	223	18.2	46.9
AAA	186	15.2	62.1
AAAA	220	17.9	80.0
AAAAA	245	20.0	100.0
Total	1227	100.0	

Survey Response Rate

Table 3 details the number of surveys sent to the principal of UIL member schools and provides the rate of return for those surveys. A total of 1,227 surveys were distributed and 718 surveys were returned. Of those 718 returned surveys, 666 surveys were entered into the statistical analysis. Those surveys that were not used were either incomplete or had data that was unusable. All conferences, with the exception of

conference AAAA, had a usable survey return rate of over 50%. Conference A, which contains the smallest schools in the UIL, had the highest return rate of over 61% while Conference AAAA had the lowest survey return rate at 49%. Overall, the usable survey return rate (1227 surveys sent and 666 surveys used in analysis) was 54.28 %.

Table 3 - Survey Response Rate

UIL Conference	Surveys Sent	Surveys Returned	Percent Returned
A	353	216	61.19
AA	223	117	52.47
AAA	186	101	54.30
AAAA	220	108	49.09
AAAAA	245	124	50.61
Total	1227	666	54.28

OVERALL PARTICIPATION RATE

Table 4 presents information on the overall participation rate in extracurricular activities at member schools of the UIL. Participation numbers at each school were provided in the instrument mailed to the principals of the 1227 UIL member schools. On the instrument the respondent indicated the number of students who participated in at least one extracurricular activity. This section of the questionnaire was not specific to whether the activity was athletic or non-athletic, just that it was extracurricular. The Participation Rate was determined by taking the number of participants in extracurricular activities reported by the school as a percentage of the total number of students enrolled in grades 9-12 reported to the UIL for Reclassification and Realignment purposes. According to the responses submitted by UIL member schools: 176 (26.5%) of the

responding schools reported participation rates in extracurricular activities of less than 56%; 171 (25.8%) of the responding schools reported participation rates in extracurricular activities between 56% and 69%; 156 (23.5%) of the responding schools reported participation rates in extracurricular activities between 69% and 85%; 160 (24.1%) of the responding schools reported participation rates in extracurricular activities in excess of 85%.

Table 4 - Participation Rate in Extracurricular Activities

Percent Participating	Frequency	Valid Percent	Cumulative Percent
<55.9	176	26.5	26.5
56 – 68.9	171	25.8	52.3
69 – 84.9	156	23.5	75.9
85 +	160	24.1	100.0
Total	663	100.0	

ATHLETIC PARTICIPATION RATE

Table 5 presents information on the participation rate in athletic extracurricular activities at member schools of the UIL. Participation numbers at each school were provided in the instrument mailed to the principals of the 1227 UIL member schools. On the instrument the respondent indicated the number of students who participated in athletic extracurricular activities. The Athletic Extracurricular Activity Participation Rate was determined by taking the number of participants in athletic extracurricular activities reported by the school as a percentage of the total number of students enrolled in grades 9-12 reported to the UIL for Reclassification and Realignment purposes. According to the

responses submitted by UIL member schools: 183 (27.5%) of the responding schools reported athletic extracurricular activities participation rates of less than 35%; 174 (26.2%) of the responding schools reported athletic extracurricular activities participation rates between 35% and 46%; 144 (21.7%) of the responding schools reported athletic extracurricular activities participation rates between 46% and 62%; 164 (24.7%) of the responding schools reported athletic extracurricular activities participation rates in excess of 62%.

Table 5 - Participation Rate in Athletic Extracurricular Activities

Percent Participating	Frequency	Valid Percent	Cumulative Percent
<34.9	183	27.5	27.5
35 – 45.9	174	26.2	53.7
46 – 61.9	144	21.7	75.3
62 +	164	24.7	100.0
Total	665	100.0	

NON-ATHLETIC PARTICIPATION RATE

Table 6 presents information on the participation rate in non-athletic extracurricular activities at member schools of the UIL. Participation numbers at each school were provided in the instrument mailed to the principals of the 1227 UIL member schools. On the instrument the respondent indicated the number of students who participated in non-athletic extracurricular activities. The Non-athletic Extracurricular Activity Participation Rate was determined by taking the number of participants in non-athletic extracurricular activities reported by the school as a percentage of the total

number of students enrolled in grades 9-12 reported to the UIL for Reclassification and Realignment purposes. According to the responses submitted by UIL member schools: 187 (28.1%) of the responding schools reported non-athletic extracurricular activities participation rates of less than 21%; 181 (27.2%) of the responding schools reported non-athletic extracurricular activities participation rates between 21% and 31%; 165 (24.8%) of the responding schools reported non-athletic extracurricular activities participation rates between 31% and 46%; 132 (19.8%) of the responding schools reported non-athletic extracurricular activities participation rates in excess of 46%.

Table 6 - Participation Rate in Non-athletic Extracurricular Activities

Percent Participating	Frequency	Valid Percent	Cumulative Percent
<20.9	187	28.1	28.1
21 – 30.9	181	27.2	55.3
31 – 45.9	165	24.8	80.2
46 +	132	19.8	100.0
Total	665	100.0	

As indicated earlier in Chapter IV, the aim of this study was to investigate the relationship between participation rates in school extracurricular activity programs and school factors such as academic achievement, attendance, dropouts and discipline. The data on participation rates precede this paragraph. The following tables (7-13) are specific to the academic achievement variable. Following those, tables 14-16 provide information on school attendance rates, drop out rates and rates of discipline referrals for the schools. All the information presented in tables 7-16 were collected from Texas

Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Academic Achievement Variables

The specific items that comprise the academic achievement portion of the study include: percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. This information was collected by the researcher from the Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year and entered into a Microsoft Excel document. This document was then transformed into a SPSS file for evaluation purposes. The researcher entered data for over 1,000 of the UIL member schools and included all this data in the evaluation of the following tables. This leads to an increased number of schools in the following tables, rather than the N of 666 in the tables (4-6) that were specific to the participation rates that only included those schools responding to the instrument.

ADVANCED COURSES

Table 7 includes information on the percentage of students who are enrolled in or have taken advanced courses. According to the Texas Education Agency, the Advanced Course Completions are compiled as the percentage of 9^{th}-12^{th} graders completing and receiving credit for at least one advanced course. The data indicates that there are

relatively few students participating in advanced classes across the state. According to the responses submitted by UIL member schools: 268 (23.4%) of the schools reported a percentage of students taking an advanced class of less than 12%; 296 (25.9%) of the schools reported a percentage of students taking an advanced class between 12% and 17%; 291 (25.4%) of the schools reported a percentage of students taking an advanced class between 17% and 22.5%; 289 (25.3%) of the schools reported a percentage of students taking an advanced class in excess of 22.6%. The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 7 - Percent of Students Taking Advanced Courses

Percent in Advanced	Frequency	Valid Percent	Cumulative Percent
0-12	268	23.4	23.4
12.1-17	296	25.9	49.3
17.1-22.5	291	25.4	74.7
22.6 +	289	25.3	100.0
Total	1144	100.0	

GRADUATION PLAN

Table 8 includes information on the percentage of students who were reported as participating in the recognized or distinguished achievement graduation plans. The data indicates that the number of participants in the recognized or distinguished achievement plans varies across the state. According to the responses submitted by UIL member schools: 276 (24.5%) of the schools reported a percentage of students who were reported

as participating in the recognized or distinguished achievement graduation plans of less than 46%; 277 (24.6%) of the schools reported a percentage of students who were reported as participating in the recognized or distinguished achievement graduation plans between 46% and 58%; 286 (25.4%) of the schools reported a percentage of students who were reported as participating in the recognized or distinguished achievement graduation plans between 58% and 70%; 289 (25.6%) of the schools reported a percentage of students who were reported as participating in the recognized or distinguished achievement graduation plans in excess of 70%; The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 8 - Percent of Students Graduating with Recognized or Distinguished Achievement

Percent on Grad. Plan	Frequency	Valid Percent	Cumulative Percent
0-46	276	24.5	24.5
46.1-58	277	24.6	49.0
58.1-70	286	25.4	74.4
70.1 +	289	25.6	100.0
Total	1128	100.0	

MEAN SAT SCORE

Table 9 includes information on the mean SAT scores for students. According to the Texas Education Agency, the average SAT score for a school was developed by taking the sum of the mathematics and verbal SAT I scores for all students divided by the number of examinees. Total scores for the SAT I range from 400 to 1600. According to

the responses submitted by UIL member schools: 223 (25.7%) of the schools reported a Mean SAT Score of less than 910; 208 (23.9%) of the schools reported a Mean SAT Score between 911 and 970; 227 (26.1%) of the schools reported a Mean SAT Score between 971 and 1020; 211 (24.3%) of the schools reported a Mean SAT Score in excess of 1021. The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 9 - Mean SAT Score

Score	Frequency	Valid Percent	Cumulative Percent
<910	223	25.7	25.7
911-970	208	23.9	49.6
971-1020	227	26.1	75.7
1021 +	211	24.3	100.0
Total	869	100.0	

MEAN ACT SCORE

Table 10 includes information on the Mean ACT Score for students. According to the Texas Education Agency, the average of the ACT composite scores (an average of English, mathematics, reading, and science reasoning portions of the ACT) for a school was created by summing the composite scores and dividing by the number of ACT examinees. Composite scores for the ACT range from 1 to 36. According to the responses submitted by UIL member schools: 267 (25.9%) of the schools reported a Mean ACT Score of less than 18.5; 294 (28.5%) of the schools reported a Mean ACT Score between

18.6 and 20; 247 (23.9%) of the schools reported a Mean ACT Score between 20 and 21; 224 (21.7%) of the schools reported a Mean ACT Score in excess of 21. The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 10 - Mean ACT Score

Score	Frequency	Valid Percent	Cumulative Percent
<18.5	267	25.9	25.9
18.6 - 20	294	28.5	54.4
20.1 - 21	247	23.9	78.3
21.1 +	224	21.7	100.0
Total	1032	100.0	

TAKS PASSING PERCENTAGES

Ninth Grade

Table 11 includes information on the percentage of 9th grade students who were reported as passing all sections of the TAKS Exam. According to the Texas Education Agency, the percent passing all sections of the TAKS examination was developed by taking the total number of ninth grade students who passed all the TAKS tests they attempted expressed as a percentage of the total number of students who took one or more tests. According to the responses submitted by UIL member schools: 277 (24.5%) of the schools indicated a percentage of 9th grade students who were reported as passing all sections of the TAKS Exam of less than 51%; 294 (26%) of the schools indicated a percentage of 9th grade students who were reported as passing all sections of the TAKS

Exam between 51% and 65%; 293 (25.9%) of the schools indicated a percentage of 9th grade students who were reported as passing all sections of the TAKS Exam between 65% and 76%; 268 (23.7%) of the schools indicated a percentage of 9th grade students who were reported as passing all sections of the TAKS Exam in excess of 76%; The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 11 - Percent of 9th Grade Students Passing All Sections of the TAKS Exam

Percent Passing All	Frequency	Valid Percent	Cumulative Percent
<51	277	24.5	24.5
51.1 – 64.9	294	26.0	50.4
65 – 75.9	293	25.9	76.3
76 +	268	23.7	100.0
Total	1132	100.0	

Tenth Grade

Table 12 includes information on the percentage of 10th grade students who were reported as passing all sections of the TAKS Exam. According to the Texas Education Agency, the percent passing all sections of the TAKS examination was developed by taking the total number of tenth grade students who passed all the TAKS tests they attempted expressed as a percentage of the total number of students who took one or more tests. According to the responses submitted by UIL member schools: 282 (24.7%) of the schools indicated a percentage of 10th grade students who were reported as passing

all sections of the TAKS Exam of less than 41%; 287 (25.2%) of the schools indicated a percentage of 10th grade students who were reported as passing all sections of the TAKS Exam between 41% and 54%; 269 (23.6%) of the schools indicated a percentage of 10th grade students who were reported as passing all sections of the TAKS Exam between 54% and 64%; 302 (26.5%) of the schools indicated a percentage of 10th grade students who were reported as passing all sections of the TAKS Exam in excess of 64%; The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 12 - Percent of 10th Grade Students Passing All Sections of the TAKS Exam

Percent Passing All	Frequency	Valid Percent	Cumulative Percent
<41	282	24.7	24.7
41 – 53.9	287	25.2	49.9
54 – 63.9	269	23.6	73.5
64 +	302	26.5	100.0
Total	1140	100.0	

Eleventh Grade

Table 13 includes information on the percentage of 11th grade students who were reported as passing all sections of the TAKS Exam. According to the Texas Education Agency, the percent passing all sections of the TAKS examination was developed by taking the total number of eleventh grade students who passed all the TAKS tests they

attempted expressed as a percentage of the total number of students who took one or more tests. According to the responses submitted by UIL member schools: 274 (24%) of the schools indicated a percentage of 11th grade students who were reported as passing all sections of the TAKS Exam of less than 35%; 282 (24.7%) of the schools indicated a percentage of 11th grade students who were reported as passing all sections of the TAKS Exam between 35% and 47%; 290 (25.4%) of the schools indicated a percentage of 11th grade students who were reported as passing all sections of the TAKS Exam between 47% and 59%; 294 (25.8%) of the schools indicated a percentage of 11th grade students who were reported as passing all sections of the TAKS Exam in excess of 59%; The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 13 - Percent of 11th Grade Students Passing All Sections of the TAKS Exam

Percent Passing All	Frequency	Valid Percent	Cumulative Percent
<35	274	24.0	24.0
35 – 46.9	282	24.7	48.8
47 – 58.9	290	25.4	74.2
59 +	294	25.8	100.0
Total	1140	100.0	

Attendance Rate

Table 14 includes information on the rate of student attendance at school. According to the Texas Education Agency, the Attendance Rate was compiled by taking the total number of days, summed for all students, that students were present in the prior school year divided by the total number of days students were in membership during that school year. According to the responses submitted by UIL member schools: 259 (22.5%) of the schools reported an Attendance Rate of less than 94%; 254 (22.1%) of the schools reported an Attendance Rate between 94% and 95 %; 315 (27.4%) of the schools reported an Attendance Rate between 95% and 96%; 321 (27.9%) of the schools reported an Attendance Rate in excess of 96%. The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 14 - Attendance Rate

Percent Attendance	Frequency	Valid Percent	Cumulative Percent
< 94	259	22.5	22.5
94.1-95	254	22.1	44.6
95.1-96	315	27.4	72.1
96.1 +	321	27.9	100.0
Total	1149	100.0	

Drop Out Rate

Table 15 includes information on the drop out rate of the school. According to the Texas Education Agency, the Drop Out Rate of the school was compiled by taking the total number of students reported as dropouts during the prior school year in grades 7–12 expressed as a percent of the total number of students in attendance at any time during that school year in grades 7–12. The TEA deletes from the count any student who was erroneously reported as a dropout, such as students who are found to be enrolled in another district, reported as graduates by another district, or students who have received their General Educational Development (GED) certificate. According to the responses submitted by UIL member schools: 324 (28.2%) of the schools reported a Drop Out Rate of zero (0)%; 287 (25%) of the schools reported a Drop Out Rate between .1% and .5 %; 223 (19.4%) of the schools reported a Drop Out Rate between .51% and 1%; 315 (27.4%) of the schools reported a Drop Out Rate in excess of 1%. The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 15 - Drop Out Rate

Drop Out %	Frequency	Valid Percent	Cumulative Percent
0	324	28.2	28.2
.1-.5	287	25.0	53.2
.51 - 1	223	19.4	72.6
1 +	315	27.4	100.0
Total	1149	100.0	

Discipline Referral Rate

Table 16 includes information on the percent of students with discipline referrals. According to the Texas Education Agency, the Rate of Discipline Referrals of the school was compiled by taking the total number of students reported being referred for discipline during the prior school year expressed as a percent of the total number of students in attendance during that school year. According to the responses submitted by UIL member schools: 266 (23.2%) of the schools reported a Discipline Referral Rate of less than 1%; 291 (25.3%) of the schools reported a Discipline Referral Rate between 1% and 2.5%; 299 (26%) of the schools reported a Discipline Referral Rate between 2.5% and 4.5%; 293 (25.5%) of the schools reported a Discipline Referral Rate in excess of 4.5%. The data for this table were collected from Texas Education Agency databases, specifically the Academic Excellence Indicator System (AEIS) campus reports from the 2002-2003 school year.

Table 16 - Percent of Students with Discipline Referrals

Percent w/ Referrals	Frequency	Valid Percent	Cumulative Percent
<1	266	23.2	23.2
1 – 2.5	291	25.3	48.5
2.5 – 4.5	299	26.0	74.5
4.5 +	293	25.5	100.0
Total	1149	100.0	

RESEARCH QUESTION ONE

What is the relationship between the overall participation rate in Texas public school extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

Research question one includes the variables of participation rate in extracurricular activities, academic achievement (percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven), attendance rate, drop out rate and discipline referral rate.

Overall Participation Rate and Academic Achievement

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven.

OVERALL PARTICIPATION RATE AND PERCENT TAKING ADVANCED COURSES

According to the Texas Education Agency, the Advanced Course Completions are compiled as the percentage of 9^{th}-12^{th} graders completing and receiving credit for at least one advanced course. The results of the correlation analysis between Participation Rate in

Extracurricular Activities and Percent of Students Taking Advanced Courses are presented in Table 17.

Table 17 - Correlation between Participation Rate in Extracurricular Activities and Percent of Students Taking Advanced Courses

		Percent of Students Taking Advanced Courses
Participation Rate	Pearson Correlation	-.008
	Sig. (2-tailed)	.789
	N	1142

The correlation coefficient value of -.008 indicates no significant relationship between Participation Rate in Extracurricular Activities and Percent of Students Taking Advanced Courses.

OVERALL PARTICIPATION RATE AND GRADUATION PLAN

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Extracurricular Activities and Percent of Students Graduating Under the Recognized or Distinguished Achievement Plan are presented in Table 18.

Table 18 - Correlation between Participation Rate in Extracurricular Activities and Percent of Students Graduating with Recognized or Distinguished Achievement

		Percent of Students Graduating Under the Recognized or Distinguished Achievement Plan
Participation Rate	Pearson Correlation	-.017
	Sig. (2-tailed)	.558
	N	1126

The correlation coefficient value of -.017 indicates no significant relationship between Participation Rate in Extracurricular Activities and Percent of Students Graduating Under the Recognized or Distinguished Achievement Plan.

OVERALL PARTICIPATION RATE AND MEAN SAT SCORE

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Extracurricular Activities and Mean SAT Score are presented in Table 19.

Table 19 - Correlation between Participation Rate in Extracurricular Activities and Mean SAT Score

		Mean SAT Score
Participation Rate	Pearson Correlation	.111 **
	Sig. (2-tailed)	.001
	N	867

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .111 indicates a relatively weak, and statistically significant positive relationship between Participation Rate in Extracurricular Activities and Mean SAT Score. These data suggest that as the Participation Rate in Extracurricular Activities increases, the Mean SAT Score increases, and that this positive relationship is statistically significant.

OVERALL PARTICIPATION RATE AND MEAN ACT SCORE

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Extracurricular Activities and Mean ACT Score are presented in Table 20.

Table 20 - Correlation between Participation Rate in Extracurricular Activities and Mean ACT Score

		Mean ACT Score
Participation Rate	Pearson Correlation	.115 **
	Sig. (2-tailed)	.000
	N	1031

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .115 indicates a relatively weak, and statistically significant, positive relationship between Participation Rate in Extracurricular Activities and Mean ACT Score. These data suggest that as the Participation Rate in Extracurricular Activities increases, the Mean ACT Score increases, and that this positive relationship is statistically significant.

OVERALL PARTICIPATION RATE AND TAKS PASSING PERCENTAGES

Ninth Grade

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Extracurricular Activities and Percent of 9th Grade Students Passing All Sections of the TAKS Exam are presented in Table 21.

Table 21 - Correlation between Participation Rate in Extracurricular Activities and Percent of 9th Grade Students Passing All Sections of the TAKS Exam

		Percent of 9th Grade Students Passing All Sections of the TAKS Exam
Participation Rate	Pearson Correlation	.132 **
	Sig. (2-tailed)	.000
	N	1130

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .132 indicates a relatively weak, and statistically significant, positive relationship between Participation Rate in Extracurricular Activities and Percent of 9th Grade Students Passing All Sections of the TAKS Exam. These data suggest that as the Participation Rate in Extracurricular Activities increases, the Percent of 9th Grade Students Passing All Sections of the TAKS Exam increases, and that this positive relationship is statistically significant.

Tenth Grade

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Extracurricular Activities and Percent of 10th Grade Students Passing All Sections of the TAKS Exam are presented in Table 22.

Table 22 - Correlation between Participation Rate in Extracurricular Activities and Percent of 10th Grade Students Passing All Sections of the TAKS Exam

		Percent of 10th Grade Students Passing All Sections of the TAKS Exam
Participation Rate	Pearson Correlation	.142 **
	Sig. (2-tailed)	.000
	N	1138

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .142 indicates a relatively weak, and statistically significant, positive relationship between Participation Rate in Extracurricular Activities and Percent of 10th Grade Students Passing All Sections of the TAKS Exam. These data suggest that as the Participation Rate in Extracurricular Activities increases, the Percent of 10th Grade Students Passing All Sections of the TAKS Exam increases, and that this positive relationship is statistically significant.

Eleventh Grade

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Extracurricular Activities and Percent of 11th Grade Students Passing All Sections of the TAKS Exam are presented in Table 23.

Table 23 - Correlation between Participation Rate in Extracurricular Activities and Percent of 11th Grade Students Passing All Sections of the TAKS Exam

		Percent of 11th Grade Students Passing All Sections of the TAKS Exam
Participation Rate	Pearson Correlation	.091 **
	Sig. (2-tailed)	.002
	N	1138

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .091 indicates a somewhat weak, and statistically significant, positive relationship between Participation Rate in Extracurricular Activities and Percent of 11th Grade Students Passing All Sections of the TAKS Exam. These data suggest that as the Participation Rate in Extracurricular Activities increases, the Percent of 11th Grade Students Passing All Sections of the TAKS Exam increases, and that this positive relationship is statistically significant.

Overall Participation Rate and Attendance Rate

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Attendance Rate. According to the Texas Education Agency, the Attendance Rate was compiled by taking the total number of days, summed for all students, that students were present in the prior school year divided by the total number of days students were in membership during that school year. The results of the correlation analysis between Participation Rate in Extracurricular Activities and Attendance Rate are presented in Table 24.

Table 24 - Correlation between Participation Rate in Extracurricular Activities and Attendance Rate

		Attendance Rate
Participation Rate	Pearson Correlation	.233 **
	Sig. (2-tailed)	.000
	N	1147

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .233 indicates a moderate, and statistically significant, positive relationship between Participation Rate in Extracurricular Activities and Attendance Rate. These data suggest that as the Participation Rate in Extracurricular Activities increases, the Attendance Rate increases, and that this positive relationship is statistically significant.

Overall Participation Rate and Drop Out Rate

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Drop Out Rate. According to the Texas Education Agency, the Drop Out Rate of the school was compiled by taking the total number of students reported as dropouts during the prior school year in grades 7–12 expressed as a percent of the total number of students in attendance at any time during that school year in grades 7–12. The TEA deletes from the count any student who was erroneously reported as a dropout, such as students who are found to be enrolled in another district, reported as graduates by another district, or students who have received their General Educational Development (GED) certificate. The results of the correlation

analysis between Participation Rate in Extracurricular Activities and Drop Out Rate are presented in Table 25.

Table 25 - Correlation between Participation Rate in Extracurricular Activities and Drop Out Rate

		Drop Out Rate
Participation Rate	Pearson Correlation	-.126 **
	Sig. (2-tailed)	.000
	N	1147

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of -.126 indicates a somewhat weak, and statistically significant, negative relationship between Participation Rate in Extracurricular Activities and Drop Out Rate. These data suggest that as the Participation Rate in Extracurricular Activities increases, the Drop Out Rate decreases, and that this negative relationship is statistically significant.

Overall Participation Rate and Discipline Referral Rate

The study utilizes correlation analysis to test the relationship between the Participation Rate in Extracurricular Activities and Discipline Referral Rate. According to the Texas Education Agency, the Rate of Discipline Referrals of the school was compiled by taking the total number of students reported being referred for discipline during the prior school year expressed as a percent of the total number of students in attendance during that school year. The results of the correlation analysis between Participation Rate in Extracurricular Activities and Discipline Referral Rate are presented in Table 26.

Table 26 - Correlation between Participation Rate in Extracurricular Activities and Discipline Referral Rate

		Percent of Students With Discipline Referrals
Participation Rate	Pearson Correlation	-.096 **
	Sig. (2-tailed)	.001
	N	1147

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of -.096 indicates a somewhat weak, and statistically significant, negative relationship between Participation Rate in Extracurricular Activities and Discipline Referral Rate. These data suggest that as the Participation Rate in Extracurricular Activities increases, the Discipline Referral Rate decreases, and that this negative relationship is statistically significant.

Summary of Statistical Analysis Results for Research Question One

The Overall Participation Rate in Extracurricular Activities has a statistically significant relationship with most of the factors included in the study. There are positive, statistically significant relationships with attendance rates and all academic achievement variables - with the exception of percent of students taking advanced courses and students participating in the recognized or distinguished achievement graduation plans (where there were no statistically significant relationships). There are negative, statistically significant relationships with the variables of drop out rates and discipline referral rates.

RESEARCH QUESTION TWO

What is the relationship between the participation rate in Texas public school athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

Research question two includes the variables of participation rate in athletic extracurricular activities, academic achievement (percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven), attendance rate, drop out rate and discipline referral rate.

Athletic Participation Rate and Academic Achievement

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven.

ATHLETIC PARTICIPATION RATE AND ADVANCED COURSES

According to the Texas Education Agency, the Advanced Course Completions are compiled as the percentage of 9^{th}-12^{th} graders completing and receiving credit for at least one advanced course. The results of the correlation analysis between Participation Rate in

Athletic Extracurricular Activities and Percent of Students Taking Advanced Courses are presented in Table 27.

Table 27 - Correlation between Participation Rate in Athletic Extracurricular Activities and Percent of Students Taking Advanced Courses

		Percent of Students Taking Advanced Courses
Participation Rate in Athletic Activities	Pearson Correlation	-.020
	Sig. (2-tailed)	.506
	N	1142

The correlation coefficient value of -.020 indicates no significant relationship between Participation Rate in Athletic Extracurricular Activities and Percent of Students Taking Advanced Courses.

ATHLETIC PARTICIPATION RATE AND GRADUATION PLAN

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Athletic Extracurricular Activities and Percent of Students Graduating Under the Recognized or Distinguished Achievement Plan are presented in Table 28.

Table 28 - Correlation between Participation Rate in Athletic Extracurricular Activities and Percent of Students Graduating with Recognized or Distinguished Achievement

		Percent of Students Graduating Under the Recognized or Distinguished Achievement Plan
Participation Rate in Athletic Activities	Pearson Correlation	-.024
	Sig. (2-tailed)	.430
	N	1126

The correlation coefficient value of -.024 indicates no significant relationship between Participation Rate in Athletic Extracurricular Activities and Percent of Students Graduating Under the Recognized or Distinguished Achievement Plan.

ATHLETIC PARTICIPATION RATE AND MEAN SAT SCORE

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Athletic Extracurricular Activities and Mean SAT Score are presented in Table 29.

Table 29 - Correlation between Participation Rate in Athletic Extracurricular Activities and Mean SAT Score

		Mean SAT Score
Participation Rate in Athletic Activities	Pearson Correlation	.068 *
	Sig. (2-tailed)	.044
	N	867

* Correlation is significant at the 0.05 level (2-tailed).

The correlation coefficient value of .068 indicates a relatively weak, and statistically significant, positive relationship between Participation Rate in Athletic Extracurricular Activities and Mean SAT Score. These data suggest that as the Participation Rate in Athletic Extracurricular Activities increases, the Mean SAT Score increases, and that this positive relationship is statistically significant.

ATHLETIC PARTICIPATION RATE AND MEAN ACT SCORE

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Athletic Extracurricular Activities and Mean ACT Score are presented in Table 30.

Table 30 - Correlation between Participation Rate in Athletic Extracurricular Activities and Mean ACT Score

		Mean ACT Score
Participation Rate in Athletic Activities	Pearson Correlation	.083 **
	Sig. (2-tailed)	.008
	N	1031

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .083 indicates a weak, and statistically significant, positive relationship between Participation Rate in Athletic Extracurricular Activities and Mean ACT Score. These data suggest that as the Participation Rate in Athletic Extracurricular Activities increases, the Mean ACT Score increases, and that this positive relationship is statistically significant.

ATHLETIC PARTICIPATION RATE AND TAKS PASSING PERCENTAGES

Ninth Grade

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Athletic Extracurricular Activities and

Percent of 9th Grade Students Passing All Sections of the TAKS Exam are presented in Table 31.

Table 31 - Correlation between Participation Rate in Athletic Extracurricular Activities and Percent of 9th Grade Students Passing All Sections of the TAKS Exam

		Percent of 9th Grade Students Passing All Sections of the TAKS Exam
Participation Rate in Athletic Activities	Pearson Correlation	.128 **
	Sig. (2-tailed)	.000
	N	1130

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .128 indicates a relatively weak, and statistically significant, positive relationship between Participation Rate in Athletic Extracurricular Activities and Percent of 9th Grade Students Passing All Sections of the TAKS Exam. These data suggest that as the Participation Rate in Athletic Extracurricular Activities increases, the Percent of 9th Grade Students Passing All Sections of the TAKS Exam increases, and that this positive relationship is statistically significant.

Tenth Grade

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the

correlation analysis between Participation Rate in Athletic Extracurricular Activities and Percent of 10th Grade Students Passing All Sections of the TAKS Exam are presented in Table 32.

Table 32 - Correlation between Participation Rate in Athletic Extracurricular Activities and Percent of 10th Grade Students Passing All Sections of the TAKS Exam

		Percent of 10th Grade Students Passing All Sections of the TAKS Exam
Participation Rate in Athletic Activities	Pearson Correlation	.133 **
	Sig. (2-tailed)	.000
	N	1138

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .133 indicates a relatively weak, and statistically significant, positive relationship between Participation Rate in Athletic Extracurricular Activities and Percent of 10th Grade Students Passing All Sections of the TAKS Exam. These data suggest that as the Participation Rate in Athletic Extracurricular Activities increases, the Percent of 10th Grade Students Passing All Sections of the TAKS Exam increases, and that this positive relationship is statistically significant.

Eleventh Grade

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing

all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Athletic Extracurricular Activities and Percent of 11th Grade Students Passing All Sections of the TAKS Exam are presented in Table 33.

Table 33 - Correlation between Participation Rate in Athletic Extracurricular Activities and Percent of 11th Grade Students Passing All Sections of the TAKS Exam

		Percent of 11th Grade Students Passing All Sections of the TAKS Exam
Participation Rate in Athletic Activities	Pearson Correlation	.085 **
	Sig. (2-tailed)	.004
	N	1138

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .085 indicates a relatively weak, and statistically significant, positive relationship between Participation Rate in Athletic Extracurricular Activities and Percent of 11th Grade Students Passing All Sections of the TAKS Exam. These data suggest that as the Participation Rate in Athletic Extracurricular Activities increases, the Percent of 11th Grade Students Passing All Sections of the TAKS Exam increases, and that this positive relationship is statistically significant.

Athletic Participation Rate and Attendance Rate

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Attendance Rate. According to the Texas Education Agency, the Attendance Rate was compiled by taking the total number of days, summed for all students, that students were present in the prior school

year divided by the total number of days students were in membership during that school year. The results of the correlation analysis between Participation Rate in Athletic Extracurricular Activities and Attendance Rate are presented in Table 34.

Table 34 - Correlation between Participation Rate in Athletic Extracurricular Activities and Attendance Rate

		Attendance Rate
Participation Rate in Athletic Activities	Pearson Correlation	.247 **
	Sig. (2-tailed)	.000
	N	1147

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .247 indicates a moderate, and statistically significant, positive relationship between Participation Rate in Athletic Extracurricular Activities and Attendance Rate. These data suggest that as the Participation Rate in Athletic Extracurricular Activities increases, the Attendance Rate increases, and that this positive relationship is statistically significant.

Athletic Participation Rate and Drop Out Rate

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Drop Out Rate. According to the Texas Education Agency, the Drop Out Rate of the school was compiled by taking the total number of students reported as dropouts during the prior school year in grades 7–12 expressed as a percent of the total number of students in attendance at any time during that school year in grades 7–12. The TEA deletes from the count any student who was erroneously reported as a dropout, such as students who are found to be enrolled in

another district, reported as graduates by another district, or students who have received their General Educational Development (GED) certificate. The results of the correlation analysis between Participation Rate in Athletic Extracurricular Activities and Drop Out Rate are presented in Table 35.

Table 35 - Correlation between Participation Rate in Athletic Extracurricular Activities and Drop Out Rate

		Drop Out Rate
Participation Rate in Athletic Activities	Pearson Correlation	-.141 **
	Sig. (2-tailed)	.000
	N	1147

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of -.141 indicates a somewhat weak, and statistically significant, negative relationship between Participation Rate in Athletic Extracurricular Activities and Drop Out Rate. These data suggest that as the Participation Rate in Athletic Extracurricular Activities increases, the Drop Out Rate decreases, and that this negative relationship is statistically significant.

Athletic Participation Rate and Discipline Referral Rate

The study utilizes correlation analysis to test the relationship between the Participation Rate in Athletic Extracurricular Activities and Discipline Referral Rate. According to the Texas Education Agency, the Rate of Discipline Referrals of the school was compiled by taking the total number of students reported being referred for discipline during the prior school year expressed as a percent of the total number of students in attendance during that school year. The results of the correlation analysis between

Participation Rate in Athletic Extracurricular Activities and Discipline Referral Rate are presented in Table 36.

Table 36 - Correlation between Participation Rate in Athletic Extracurricular Activities and Discipline Referral Rate

		Percent of Students With Discipline Referrals
Participation Rate in Athletic Activities	Pearson Correlation	-.139 **
	Sig. (2-tailed)	.000
	N	1147

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of -.139 indicates a somewhat weak, and statistically significant, negative relationship between Participation Rate in Athletic Extracurricular Activities and Discipline Referral Rate. These data suggest that as the Participation Rate in Athletic Extracurricular Activities increases, the Discipline Referral Rate decreases, and that this negative relationship is statistically significant.

Summary of Statistical Analysis Results for Research Question Two

The Participation Rate in Athletic Extracurricular Activities has a statistically significant relationship with most of the factors included in the study. There are positive, statistically significant relationships with attendance rates and almost all academic achievement variables - with the exception of Mean SAT score (where the relationship is significant at the .05 level), percent of students taking advanced courses and students participating in the recognized or distinguished achievement graduation plans (where

there were no statistically significant relationships). There are negative, statistically significant relationships with the variables of drop out rates and discipline referral rates.

RESEARCH QUESTION THREE

What is the relationship between the participation rate in Texas public school non-athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

Research question three includes the variables of participation rate in non-athletic extracurricular activities, academic achievement (percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven), attendance rate, drop out rate and discipline referral rate.

Non-athletic Participation Rate and Academic Achievement

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven.

NON-ATHLETIC PARTICIPATION RATE AND ADVANCED COURSES

According to the Texas Education Agency, the Advanced Course Completions are compiled as the percentage of 9^{th}-12^{th} graders completing and receiving credit for at least one advanced course. The results of the correlation analysis between Participation Rate in Non-athletic Extracurricular Activities and Percent of Students Taking Advanced Courses are presented in Table 37.

Table 37 - Correlation between Participation Rate in Non-athletic Extracurricular Activities and Percent of Students Taking Advanced Courses

		Percent of Students Taking Advanced Courses
Participation Rate in Non-athletic Activities	Pearson Correlation	.014
	Sig. (2-tailed)	.645
	N	1142

The correlation coefficient value of .014 indicate no significant relationship between Participation Rate in Non-athletic Extracurricular Activities and Percent of Students Taking Advanced Courses.

NON-ATHLETIC PARTICIPATION RATE AND GRADUATION PLAN

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The

results of the correlation analysis between Participation Rate in Non-athletic Extracurricular Activities and Percent of Students Graduating Under the Recognized or Distinguished Achievement Plan are presented in Table 38.

Table 38 - Correlation between Participation Rate in Non-athletic Extracurricular Activities and Percent of Students Graduating with Recognized or Distinguished Achievement

		Percent of Students Graduating Under the Recognized or Distinguished Achievement Plan
Participation Rate in Non-athletic Activities	Pearson Correlation	-.016
	Sig. (2-tailed)	.602
	N	1126

The correlation coefficient value of -.016 indicate no significant relationship between Participation Rate in Non-athletic Extracurricular Activities and Percent of Students Graduating Under the Recognized or Distinguished Achievement Plan.

NON-ATHLETIC PARTICIPATION RATE AND MEAN SAT SCORE

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Non-athletic

Extracurricular Activities and Mean SAT Score are presented in Table 39.

Table 39 - Correlation between Participation Rate in Non-athletic Extracurricular Activities and Mean SAT Score

		Mean SAT Score
Participation Rate in Non-athletic Activities	Pearson Correlation	.113 **
	Sig. (2-tailed)	.001
	N	867

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .113 indicates a relatively weak, and statistically significant, positive relationship between Participation Rate in Non-athletic Extracurricular Activities and Mean SAT Score. These data suggest that as the Participation Rate in Non-athletic Extracurricular Activities increases, the Mean SAT Score increases, and that this positive relationship is statistically significant.

NON-ATHLETIC PARTICIPATION RATE AND MEAN ACT SCORE

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Non-athletic Extracurricular Activities and Mean ACT Score are presented in Table 40.

Table 40 - Correlation between Participation Rate in Non-athletic Extracurricular Activities and Mean ACT Score

		Mean ACT Score
Participation Rate in Non-athletic Activities	Pearson Correlation	.143 **
	Sig. (2-tailed)	.000
	N	1031

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .143 indicates a relatively weak, and statistically significant, positive relationship between Participation Rate in Non-athletic Extracurricular Activities and Mean ACT Score. These data suggest that as the Participation Rate in Non-athletic Extracurricular Activities increases, the Mean ACT Score increases, and that this positive relationship is statistically significant.

NON-ATHLETIC PARTICIPATION RATE AND TAKS PASSING PERCENTAGES

Ninth Grade

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Non-athletic Extracurricular Activities and Percent of 9th Grade Students Passing All Sections of the TAKS Exam are presented in Table 41.

Table 41 - Correlation between Participation Rate in Non-athletic Extracurricular Activities and Percent of 9th Grade Students Passing All Sections of the TAKS Exam

		Percent of 9th Grade Students Passing All Sections of the TAKS Exam
Participation Rate in Non-athletic Activities	Pearson Correlation	.160 **
	Sig. (2-tailed)	.000
	N	1130

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .160 indicates a weak, and statistically significant, positive relationship between Participation Rate in Non-athletic Extracurricular Activities and Percent of 9th Grade Students Passing All Sections of the TAKS Exam. These data suggest that as the Participation Rate in Non-athletic Extracurricular Activities increases, the Percent of 9th Grade Students Passing All Sections of the TAKS Exam increases, and that this positive relationship is statistically significant.

Tenth Grade

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Non-athletic

Extracurricular Activities and Percent of 10th Grade Students Passing All Sections of the TAKS Exam are presented in Table 42.

Table 42 - Correlation between Participation Rate in Non-athletic Extracurricular Activities and Percent of 10th Grade Students Passing All Sections of the TAKS Exam

		Percent of 10th Grade Students Passing All Sections of the TAKS Exam
Participation Rate in Non-athletic Activities	Pearson Correlation	.172 **
	Sig. (2-tailed)	.000
	N	1138

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .172 indicates a weak, and statistically significant, positive relationship between Participation Rate in Non-athletic Extracurricular Activities and Percent of 10th Grade Students Passing All Sections of the TAKS Exam. These data suggest that as the Participation Rate in Non-athletic Extracurricular Activities increases, the Percent of 10th Grade Students Passing All Sections of the TAKS Exam increases, and that this positive relationship is statistically significant.

Eleventh Grade

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Academic Achievement. The specific variables included in Academic Achievement include percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of

students passing all portions of the TAKS exam in grades nine, ten and eleven. The results of the correlation analysis between Participation Rate in Non-athletic Extracurricular Activities and Percent of 11th Grade Students Passing All Sections of the TAKS Exam are presented in Table 43.

Table 43 - Correlation between Participation Rate in Non-athletic Extracurricular Activities and Percent of 11th Grade Students Passing All Sections of the TAKS Exam

		Percent of 11th Grade Students Passing All Sections of the TAKS Exam
Participation Rate in Non-athletic Activities	Pearson Correlation	.137 **
	Sig. (2-tailed)	.000
	N	1138

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .137 indicates a weak, and statistically significant, positive relationship between Participation Rate in Non-athletic Extracurricular Activities and Percent of 11th Grade Students Passing All Sections of the TAKS Exam. These data suggest that as the Participation Rate in Non-athletic Extracurricular Activities increases, the Percent of 11th Grade Students Passing All Sections of the TAKS Exam increases, and that this positive relationship is statistically significant.

Non-athletic Participation Rate and Attendance Rate

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Attendance Rate. According to the Texas Education Agency, the Attendance Rate was compiled by taking

the total number of days, summed for all students, that students were present in the prior school year divided by the total number of days students were in membership during that school year. The results of the correlation analysis between Participation Rate in Non-athletic Extracurricular Activities and Attendance Rate are presented in Table 44.

Table 44 - Correlation between Participation Rate in Non-Athletic Extracurricular Activities and Attendance Rate

		Attendance Rate
Participation Rate in Non-athletic Activities	Pearson Correlation	.253 **
	Sig. (2-tailed)	.000
	N	1147

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of .253 indicates a moderate, and statistically significant, positive relationship between Participation Rate in Non-athletic Extracurricular Activities and Attendance Rate. These data suggest that as the Participation Rate in Non-Athletic Extracurricular Activities increases, the Attendance Rate increases, and that this positive relationship is statistically significant.

Non-athletic Participation Rate and Drop Out Rate

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Drop Out Rate. According to the Texas Education Agency, the Drop Out Rate of the school was compiled by taking the total number of students reported as dropouts during the prior school year in grades 7–12 expressed as a percent of the total number of students in attendance at any time during that school year in grades 7–12. The TEA deletes from the

count any student who was erroneously reported as a dropout, such as students who are found to be enrolled in another district, reported as graduates by another district, or students who have received their General Educational Development (GED) certificate. The results of the correlation analysis between Participation Rate in Non-athletic Extracurricular Activities and Drop Out Rate are presented in Table 45.

Table 45 - Correlation between Participation Rate in Non-athletic Extracurricular Activities and Drop Out Rate

		Drop Out Rate
Participation Rate in Non-athletic Activities	Pearson Correlation	-.125 **
	Sig. (2-tailed)	.000
	N	1147

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of -.125 indicates a somewhat weak, and statistically significant, negative relationship between Participation Rate in Non-athletic Extracurricular Activities and Drop Out Rate. These data suggest that as the Participation Rate in Non-athletic Extracurricular Activities increases, the Drop Out Rate decreases, and that this negative relationship is statistically significant.

Non-athletic Participation Rate and Discipline Referral Rate

The study utilizes correlation analysis to test the relationship between the Participation Rate in Non-athletic Extracurricular Activities and Discipline Referral Rate. According to the Texas Education Agency, the Rate of Discipline Referrals of the school was compiled by taking the total number of students reported being referred for discipline during the prior school year expressed as a percent of the total number of students in

attendance during that school year. The results of the correlation analysis between Participation Rate in Non-athletic Extracurricular Activities and Discipline Referral Rate are presented in Table 46.

Table 46 - Correlation between Participation Rate in Non-athletic Extracurricular Activities and Discipline Referral Rate

		Percent of Students With Discipline Referrals
Participation Rate in Non-athletic Activities	Pearson Correlation	-.079 **
	Sig. (2-tailed)	.008
	N	1147

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of -.079 indicates a somewhat weak, and statistically significant, negative relationship between Participation Rate in Non-athletic Extracurricular Activities and Discipline Referral Rate. These data suggest that as the Participation Rate in Non-athletic Extracurricular Activities increases, the Discipline Referral Rate decreases, and that this negative relationship is statistically significant.

Summary of Statistical Analysis Results for Research Question Three

The Participation Rate in Non-athletic Extracurricular Activities has a statistically significant relationship with most of the factors included in the study. There are positive, statistically significant relationships with attendance rates and almost all academic achievement variables - with the exception of percent of students taking advanced courses and students participating in the recognized or distinguished achievement graduation plans where there were no statistically significant relationships. There are

negative, statistically significant relationships with the variables of drop out rates and discipline referral rates.

RESEARCH QUESTION FOUR

What is the relationship between school size and overall participation rates in Texas public school extracurricular activity programs?

Research question four includes the variables of school size and participation rates in school extracurricular activity programs. School size, as determined by number of students enrolled in grades 9-12, was based on information released from the University Interscholastic League (UIL) as part of the biannual process of Reclassification and Realignment of schools effective for the 2004-2006 school years. The smallest schools are placed in Conference A and the largest schools are placed in conference AAAAA. Participation numbers at each school were provided in the instrument mailed to the principals of the 1227 UIL member schools. On the instrument the respondent indicated the number of students who participated in extracurricular activities.

School Size and Overall Participation Rate

The study utilizes correlation analysis to test the relationship between School size and the Overall Participation Rate in Extracurricular Activities. School size is based on information released from the University Interscholastic League (UIL) as part of the biannual process of Reclassification and Realignment of schools effective for the 2004-2006 school years. The Participation Rate was determined by taking the number of participants in extracurricular activities reported by the school as a percentage of the total

number of students enrolled in grades 9-12 reported to the UIL for Reclassification and Realignment purposes. The results of the correlation analysis between School Size and the Overall Participation Rate in Extracurricular Activities are presented in Table 47.

Table 47 - Correlation between School Size and the Overall Participation Rate in Extracurricular Activities

		Participation Rate
School Size	Pearson Correlation	-.236 **
	Sig. (2-tailed)	.000
	N	1225

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of -.236 indicates a moderate, and statistically significant, negative relationship between School Size and the Overall Participation Rate in Extracurricular Activities. These data suggest that as School Size increases, the Overall Participation Rate in Extracurricular Activities decreases, and that this negative relationship is statistically significant.

Summary of Statistical Analysis Results for Research Question Four

School Size has a statistically significant relationship with the Overall Participation Rate in Extracurricular Activities in the study. There is a negative, statistically significant relationship between the size of the school and the overall participation rate in extracurricular activities.

RESEARCH QUESTION FIVE

What is the relationship between school size and participation rates in Texas public school athletic extracurricular activity programs?

Research question five includes the variables of school size and participation rates in school athletic extracurricular activity programs. School size, as determined by number of students enrolled in grades 9-12, is based on information released from the University Interscholastic League (UIL) as part of the biannual process of Reclassification and Realignment of schools effective for the 2004-2006 school years. The smallest schools are placed in Conference A and the largest schools are placed in conference AAAAA. Participation numbers at each school were provided in the instrument mailed to the principals of the 1227 UIL member schools. On the instrument the respondent indicated the number of students who participated in athletic extracurricular activities.

School Size and Athletic Participation Rate

The study utilizes correlation analysis to test the relationship between School Size and the Participation Rate in Athletic Extracurricular Activities. School size is based on information released from the University Interscholastic League (UIL) as part of the biannual process of Reclassification and Realignment of schools effective for the 2004-2006 school years. The Participation Rate was determined by taking the number of participants in athletic extracurricular activities reported by the school as a percentage of the total number of students enrolled in grades 9-12 reported to the UIL for Reclassification and Realignment purposes. The results of the correlation analysis

between School Size and the Participation Rate in Athletic Extracurricular Activities are presented in Table 48.

Table 48 - Correlation between School Size and the Participation Rate in Athletic Extracurricular Activities

		Participation Rate in Athletic Activities
School Size	Pearson Correlation	-.310 **
	Sig. (2-tailed)	.000
	N	1225

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of -.310 indicates a moderate, and statistically significant, negative relationship between School Size and the Participation Rate in Athletic Extracurricular Activities. These data suggest that as School Size increases, the Participation Rate in Athletic Extracurricular Activities decreases, and that this negative relationship is statistically significant.

Summary of Statistical Analysis Results for Research Question Five

School Size has a statistically significant relationship with the Participation Rate in Athletic Extracurricular Activities in the study. There is a negative, statistically significant relationship between the size of the school and the participation rate in athletic extracurricular activities.

RESEARCH QUESTION SIX

What is the relationship between school size and participation rates in Texas public school non-athletic extracurricular activity programs?

Research question six includes the variables of school size and participation rates in school non-athletic extracurricular activity programs. School size, as determined by number of students enrolled in grades 9-12, is based on information released from the University Interscholastic League (UIL) as part of the biannual process of Reclassification and Realignment of schools effective for the 2004-2006 school years. The smallest schools are placed in Conference A and the largest schools are placed in conference AAAAA. Participation numbers at each school were provided in the instrument mailed to the principals of the 1227 UIL member schools. On the instrument the respondent indicated the number of students who participated in non-athletic extracurricular activities.

School Size and Non-athletic Participation Rate

The study utilizes correlation analysis to test the relationship between School Size and the Participation Rate in Non-athletic Extracurricular Activities. School size is based on information released from the University Interscholastic League (UIL) as part of the biannual process of Reclassification and Realignment of schools effective for the 2004-2006 school years. The Participation Rate was determined by taking the number of participants in non-athletic extracurricular activities reported by the school as a percentage of the total number of students enrolled in grades 9-12 reported to the UIL for Reclassification and Realignment purposes. The results of the correlation analysis

between School Size and the Participation Rate in Non-athletic Extracurricular Activities are presented in Table 49.

Table 49 - Correlation between School Size and the Participation Rate in Non-athletic Extracurricular Activities

		Participation Rate in Non-athletic Activities
School Size	Pearson Correlation	-.247 **
	Sig. (2-tailed)	.000
	N	1225

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient value of -.247 indicates a moderate, and statistically significant, negative relationship between School Size and the Participation Rate in Non-athletic Extracurricular Activities. These data suggest that as School Size increases, the Participation Rate in Non-athletic Extracurricular Activities decreases, and that this negative relationship is statistically significant.

Summary of Statistical Analysis Results for Research Question Six

School Size has a statistically significant relationship with the Participation Rate in Non-athletic Extracurricular Activities in the study. There is a negative, statistically significant relationship between the size of the school and the participation rate in non-athletic extracurricular activities.

Summary

The study utilized correlation analysis to examine the relationship between variables addressed in the six research questions. Analysis of Research Question One

found statistically significant relationships between overall participation rates in extracurricular activities and the variables of academic achievement (with the exception of percent of students taking advanced courses and students participating in the recognized or distinguished achievement graduation plans), attendance rates, drop out rates and rates of discipline referrals.

An examination of Research Question Two found statistically significant relationships between participation rates in athletic extracurricular activities and the variables of academic achievement (with the exception of mean SAT score (.05 level of significance) and percent of students taking advanced courses and students participating in the recognized or distinguished achievement graduation plans), attendance rates, drop out rates and rates of discipline referrals.

Statistical analysis of Research Question Three found statistically significant relationships between participation rates in non-athletic extracurricular activities and the variables of academic achievement (with the exception of percent of students taking advanced courses and students participating in the recognized or distinguished achievement graduation plans), attendance rates, drop out rates and rates of discipline referrals.

Analysis of Research Question Four found a statistically significant relationship between school size and the overall participation rate in extracurricular activities.

Analysis of Research Question Five found a statistically significant relationship between school size and the participation rate in athletic extracurricular activities.

Analysis of Research Question Six found a statistically significant relationship between school size and the participation rate in non-athletic extracurricular activities.

CHAPTER FIVE

SUMMARY OF FINDINGS, IMPLICATIONS OF FINDINGS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Introduction

Chapter Four detailed the collected data and statistical analysis for the specific areas addressed in this study. In the following pages, Chapter Five will provide a summary of findings for the study, discuss the implications of those findings and suggest areas for future research on these important school issues.

Summary of Findings

The purpose of this study is to investigate the relationship between participation rates in public school extracurricular activity programs and factors of academic achievement, attendance, dropouts and discipline. An additional aim is to study the relationship between school size and rate of participation in public school extracurricular activity programs. Specifically, the study addressed the following research questions:

What is the relationship between the overall participation rate in Texas public school extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between the participation rate in Texas public school athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between the participation rate in Texas public school non-athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

What is the relationship between school size and overall participation rate in Texas public school extracurricular activity programs?

What is the relationship between school size and participation rate in Texas public school athletic extracurricular activity programs?

What is the relationship between school size and participation rate in Texas public school non-athletic extracurricular activity programs?

The literature review provides the framework from which the rest of the study can be viewed. Tracing the history and development of these important aspects of the school program provides a base from which policy makers, school administrators and other researchers can draw when making decisions on how to implement positive change in schools.

The literature review contained the history of the development of extracurricular activity programs from their infancy in Greek culture to the current offering of programs in today's schooling system. Additionally, factors influencing a student's decision to participate or not participate were addressed. In addition, the review also provided a summary of various research studies conducted on the role of participation in

extracurricular activities in relation to various aspects of student and school success, both positive and negative. Following those came information on the development and current values of the school extracurricular activity program and a review of the literature relating to the factors of school disciplinary issues, dropouts and absenteeism and academic achievement.

To gather data related to the above topics, a questionnaire to determine participation figures in school extracurricular activities was sent to 1,227 member school principals of the University Interscholastic League, with 666 being returned and included in the research. Additionally, information for over 1,000 schools was collected from Texas Education Agency databases, specifically the AEIS campus reports for the 2002-2003 school year. Information collected for schools from the AEIS system included: percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score, percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven, attendance rate, drop out rate and discipline referral rate. Information on school size was collected from the University Interscholastic League, Reclassification and Realignment effective for the 2004-2006 school years.

RESEARCH QUESTION ONE

What is the relationship between the overall participation rate in Texas public school extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

Research question one investigated the relationship between the overall participation rate in extracurricular activity programs and academic achievement, attendance, dropouts and discipline. The Overall Participation Rate in Extracurricular Activities has a statistically significant relationship with most of the factors included in the study. In reference to academic achievement variables, there are positive, statistically significant relationships between the overall participation rate in extracurricular activities and mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. This would indicate that as the overall participation rate in extracurricular activities increases, academic achievement variables increase. No relationships were evident between the overall participation rate in extracurricular activities and percent of students taking advanced courses or percent of students participating in the recognized or distinguished achievement graduation plans.

The data suggested that there is a positive, statistically significant relationship between the overall participation rate in extracurricular activities and attendance rates. This would indicate that as the overall participation rate in extracurricular activities increases, attendance rates increase.

The data suggested that there is a negative, statistically significant relationship between the overall participation rate in extracurricular activities and dropout rates. This means that as the overall participation rate in extracurricular activities increases, the dropout rate at the school decreases.

The data suggested that there is a negative, statistically significant relationship between the overall participation rate in extracurricular activities and discipline referral

rates. This means that as the overall participation rate in extracurricular activities increases, the rate of discipline referrals at the school decreases.

RESEARCH QUESTION TWO

What is the relationship between the participation rate in Texas public school athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

Research question two investigated the relationship between the participation rate in athletic extracurricular activity programs and academic achievement, attendance, dropouts and discipline. The Participation Rate in Athletic Extracurricular Activities has a statistically significant relationship with most of the factors included in the study. In reference to academic achievement variables, there are positive, statistically significant relationships between the participation rate in athletic extracurricular activities and mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. This would indicate that as the participation rate increases, academic achievement variables increase. There is a positive and statistically significant relationship between the participation rate in athletic extracurricular activities and mean SAT score. No relationships were evident between the participation rate in athletic extracurricular activities and percent of students taking advanced courses or percent of students participating in the recognized or distinguished achievement graduation plans.

The data suggested that there is a positive, statistically significant relationship between the participation rate in athletic extracurricular activities and attendance rates.

This would indicate that as the participation rate in athletic extracurricular activities increases, attendance rates increase.

The data suggested that there is a negative, statistically significant relationship between the participation rate in athletic extracurricular activities and dropout rates. This means that as the participation rate in athletic extracurricular activities increases, the dropout rate for the school decreases.

The data suggested that there is a negative, statistically significant relationship between the participation rate in athletic extracurricular activities and discipline referral rates. This means that as the participation rate in athletic extracurricular activities increases, the rate of discipline referrals at the school decreases.

RESEARCH QUESTION THREE

What is the relationship between the participation rate in Texas public school non-athletic extracurricular activity programs and related factors of academic achievement, attendance, dropouts and discipline?

Research question three investigated the relationship between the participation rate in non-athletic extracurricular activity programs and academic achievement, attendance, dropouts and discipline. The Participation Rate in Non-athletic Extracurricular Activities has a statistically significant relationship with most of the factors included in the study. In reference to academic achievement variables, there are positive, statistically significant relationships between the participation rate in non-athletic extracurricular activities and mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven. This

would indicate that as the participation rate in non-athletic extracurricular activities increases, academic achievement variables increase. No relationships were evident between the participation rate in non-athletic extracurricular activities and percent of students taking advanced courses or percent of students participating in the recognized or distinguished achievement graduation plans.

The data suggested that there is a positive, statistically significant relationship between the participation rate in non-athletic extracurricular activities and attendance rates. This would indicate that as the participation rate in non-athletic extracurricular activities increases, attendance rates increase.

The data suggested that there is a negative, statistically significant relationship between the participation rate in non-athletic extracurricular activities and drop out rates. This means that as the participation rate in non-athletic extracurricular activities increases, the drop out rate for the school decreases.

The data suggested that there is a negative, statistically significant relationship between the participation rate in non-athletic extracurricular activities and discipline referral rates. This means that as the participation rate in non-athletic extracurricular activities increases, the rate of discipline referrals at the school decreases.

RESEARCH QUESTION FOUR

What is the relationship between school size and overall participation rate in Texas public school extracurricular activity programs?

Research question four investigated the relationship between school size and the overall participation rate in school extracurricular activity programs. School Size has a

statistically significant relationship with the Overall Participation Rate in Extracurricular Activities in the study. There is a negative, statistically significant relationship between the size of the school and the overall participation rate in extracurricular activities. This would indicate that as the size of the school increases, the overall participation rate in extracurricular activities decreases.

RESEARCH QUESTION FIVE

What is the relationship between school size and participation rate in Texas public school athletic extracurricular activity programs?

Research question five investigated the relationship between school size and the participation rate in school athletic extracurricular activity programs. School Size has a statistically significant relationship with the Participation Rate in Athletic Extracurricular Activities in the study. There is a negative, statistically significant relationship between the size of the school and the participation rate in athletic extracurricular activities. This would indicate that as the size of the school increases, the participation rate in athletic extracurricular activities decreases.

RESEARCH QUESTION SIX

What is the relationship between school size and participation rate in Texas public school non-athletic extracurricular activity programs?

Research question six investigated the relationship between school size and the participation rate in school non-athletic extracurricular activity programs. School Size has a statistically significant relationship with the Participation Rate in Non-athletic Extracurricular Activities in the study. There is a negative, statistically significant

relationship between the size of the school and the participation rate in non-athletic extracurricular activities. This would indicate that as the size of the school increases, the participation rate in non-athletic extracurricular activities decreases.

Implications of Findings

The aim of this study is to investigate the relationship between participation rates in school extracurricular activity programs and factors of academic achievement, attendance, dropouts and discipline. The specific factors analyzed in this study include: school size, participation rates in extracurricular activities, participation rates in athletic extracurricular activities, participation rates in non-athletic extracurricular activities, academic achievement (percent of students taking advanced classes, percent of students graduating under the recognized or distinguished achievement plans, mean SAT score, mean ACT score and percentage of students passing all portions of the TAKS exam in grades nine, ten and eleven), attendance, dropouts and discipline.

In total, the findings of this study provide support for the notion that participation in extracurricular activities can have positive implications not only for student success academically, but also for school success as a whole. Public education is under attack. Supporters must point out positive aspects of the public education program and use data as a justification for keeping and increasing those aspects of the program that are of benefit to students. One such aspect is the extracurricular activity program. Previous research points to the benefits students who participate in extracurricular activities gain in reference to academic achievement and other school related factors (absences, dropouts, discipline referrals) (Greer, 1975; Hanks and Eckland, 1976; Joekel, 1985; NFHS, 1999).

However, other existing previous research points to the fact that an over emphasis on school extracurricular activity programs, can negatively impact student and school performance on certain academic indicators (Coleman, 1961; Meier, 1999; Miracle, 1994). The purpose for school activities, as reported by the Select Committee on Public Education in 1983 (SCOPE Report, 1983), should exist only within the context and framework of the larger purposes of academic education, which encompasses the total curricular program. It is the school administrator who must take all the available information and create the right balance of activities for their particular school.

Today, widespread budget cuts have weakened and eliminated some extracurricular and co-curricular programs, which may carry hope and direction for students. By decreasing the number and quality of such programs, schools are also losing avenues that may help direct students/participants away from gang and other negative personal and social behavior. By cutting these programs, one of the most important means of socializing our youth and improving schools is slipping away. Supporters of extracurricular activities can use the results from the current study as evidence of the importance of these programs to student and school success.

IMPLICATIONS OF DATA ON PARTICIPATION RATES AND ACADEMIC ACHIEVEMENT

In reference to the participation rates (overall, athletic and non-athletic) in the school extracurricular activity program and their relationships to academic achievement, attendance, dropouts and discipline, it is clear from the data that schools with higher participation rates in extracurricular activities have statistically significant differences in their performance on the tested variables. While the correlations may not be particularly

strong, they are statistically significant. The academic achievement variable included positive relationships with regard to mean SAT score, mean ACT score and percent of students passing all sections of the TAKS exam in grades nine, ten and eleven. This indicates that as the participation rate in school extracurricular activities (overall, athletic and non-athletic) increases, the academic achievement of the students in that school increases at a statistically significant level. The implications of these results are particularly intriguing in this era of high stakes testing and school ratings. As the state and federal government move toward more standardized testing as an evaluative and assessment tool, extracurricular activity proponents can point to the positive relationships between participation in school extracurricular activities (overall, athletic and non-athletic) and academic achievement variables as a justification for increased focus on increasing participation and providing additional funds.

The academic achievement variables in this study also included percent of students taking advanced classes and percent of students graduating under the recognized or distinguished achievement plans. The data collected for the study indicated that there is not a relationship between participation rates (overall, athletic or non-athletic) in school extracurricular activity programs and percent of students taking advanced classes or percent of students graduating under the recognized or distinguished achievement plans.

IMPLICATIONS OF DATA ON PARTICIPATION RATES AND ATTENDANCE, DROPOUTS AND DISCIPLINE

Schools with high attendance rates, low dropout rates and low rates of students with discipline referrals can be positive examples for successful schools. As school funding can be directly related to average daily attendance, administrators strive to ensure high rates of attendance. School ratings can be negatively impacted by high dropout rates and high discipline referral rates. For youth to fulfill their potential in school, schools should be safe, welcoming and secure places for all students, teachers, and staff members. Without a safe learning environment, teachers may have difficulty teaching and students may have difficulty learning. Additionally, it is becoming increasingly evident that when young people feel cared for, attached to their school and feel like a part of their school, they are less likely to use substances, engage in violence, or involve themselves in disruptive school behavior (McNeely, Nonnemaker and Blum, 2002).

Attendance

Frequent truancy is also an indicator of potential schooling problems. Truants typically show little connection with school, exhibit low academic motivation, and consequently show poor school performance (Hallfors, et. al., 2002). Further, it has been suggested that the problems of drop out, absenteeism and truancy, disruptive classroom behavior, and delinquency can all be seen as outcomes of an early pattern of withdrawal from school (Finn, 1989).

The findings of the current study have particular implications to the information presented above. The data collected for this study suggest that as the participation rate in extracurricular activities (overall, athletic and non-athletic) increases, the attendance rate

increases, and that this positive relationship is statistically significant. This is extremely important for school administrators in Texas. Currently, school funding is based on the Average Daily Attendance. When students do not come to school, schools can lose funding. The results of this study provide evidence of a direct way to increase attendance rates. The relationship between participation in extracurricular activities (overall, athletic and non-athletic) and attendance rates is a somewhat strong and statistically significant □ one. In short, the results of this study indicate that as more students in a school get involved in extracurricular activities the school will see higher rates of attendance.

Dropouts

Two important factors in the success of any educational system are the rates at which young people drop out of and/or complete high school each year (USDOE, 2003). Students' attendance, interest, and attention to their studies affect how well they perform at each level and could be a determinant factor in their school completion. Levels of student effort can be illustrated by how often students are absent from school, how interested they are in their schoolwork, whether they try to do their best, whether they complete their assignments, and how much time they spend on homework and other activities such as work or watching television (Wirt, et. al., 2002).

The data for the current study suggest that there is a negative, statistically significant relationship between participation rates (overall, athletic and non-athletic) in extracurricular activities and dropout rates. This means that as the participation rate in extracurricular activities increases, the dropout rate for the school decreases. As indicated earlier, widespread budget cuts have weakened and eliminated some extracurricular and

co-curricular programs, which may carry hope and direction for students. By decreasing the number and quality of such programs, schools are also losing avenues that may help keep students/participants in school. By cutting these programs, one important means of keeping students engaged and in school is slipping away. Supporters of extracurricular activities can use the results from the current study as evidence of the importance of these programs to student retention and as a support for increasing school completion.

Discipline

It is becoming increasingly evident that when young people feel cared for, attached to their school and feel like a part of their school, they are less likely to use substances, engage in violence, or involve themselves in disruptive school behavior (McNeely, Nonnemaker and Blum, 2002). Numerous studies (Schulenberg, et. al., 1994; Taylor-Seehafer and Rew, 2000; Resnick, et. al., 1997; Bonny et. al., 2000) have demonstrated links between academic achievement, young people's attachment to school, and health behavior. Young people who feel more connected to school and earn higher grades are less likely to smoke cigarettes, use drugs, have an early sexual debut, be involved in violence, engage in disruptive behavior and be emotionally distressed than their less connected and less successful peers.

The data for the current study suggest that there is a negative, statistically significant relationship between participation rates (overall, athletic and non-athletic) in extracurricular activities and discipline referral rates. This means that as the participation rate in extracurricular activities increases, the discipline referral rate for the school decreases. Citizens expect schools to maintain safe and orderly environments conducive

to learning and positive social development (Gottfredson and Gottfredson, 2001). Schools continue to work to provide proactive guidance for students to learn the positive behaviors and values that should be a part of the education of all people. Such programs should strive to provide knowledge about violence and conflict, to increase students' understanding of their own and others' feelings, and to teach students the personal and interpersonal skills necessary to avoid negative behaviors.

The Role of Sports in Youth Development, Carnegie Corporation, New York, in a report of a meeting in March 1996, found that evidence showed that the involvement of young people in sports produces multiple benefits for them. At their best, sports programs promote responsible social behaviors and greater academic success, confidence in ones physical abilities, an appreciation of personal health and fitness, and strong social bonds with individuals and institutions. Teachers attribute these results to the discipline and work ethic that sports require. These conclusions are supported by the results of this current study, which indicate that schools with higher percentages of students involved with extracurricular activity participation have lower rates of school disruptions and disciplinary referrals.

IMPLICATIONS OF DATA ON SCHOOL SIZE AND PARTICIPATION RATES

As early as 1931, studies were addressing the aspects of participation and non-participation in extracurricular activities. Fretwell indicated that any study of participation in extracurricular activities contains two surprises. The first is the large number of activities in which a few students participate, and the second is the large number of students who do not participate in activities (Fretwell, 1931). As schools

become larger and larger, with funding limits forcing some schools to grow beyond the size that earlier convention determined to be a "large" school, activities programs have great difficulty overcoming the problem of numbers of students versus numbers of activities.

The data for the current study suggest that there is a negative, statistically significant relationship between school size and participation rates (overall, athletic and non-athletic) in extracurricular activities. This means that as the size of the school increases the participation rate (overall, athletic and non-athletic) in extracurricular activities decreases. A problem related to student participation and the disparity of activity compared to pupil ratio are other modern sociological phenomena that contribute to nonparticipation. There has been extensive research undertaken to determine the reasons for this nonparticipation in activities. Major reasons cited related to the number of activities offered, availability of these activities, and the importance of pupils having jobs (Anderson, 1941, in Frank, 1983). Other reasons for nonparticipation centered on the schools' ability to provide adequate activities with advisors who were committed to making the extracurricular programs work (Kilzer, Stephenson, and Nordberg, 1956; Spears, 1950).

In light of the results of the current study with regard to participation in extracurricular activities and academic achievement, attendance, dropouts and discipline, the rate of participation in a school has particular implications. If, as the data suggest, participation rates decrease as the size of the school increases, this must be addressed. Supporters of activity programs must take proactive steps to involve students in activities.

It appears that this is even more important in schools with larger number of students where lower participation rates have been reported.

Recommendations for Future Research

The current study investigated the relationship between participation rates in school extracurricular activity programs (overall, athletic and non-athletic) and academic achievement, attendance, dropouts and discipline. Another aspect of the study involved the relationship of school size and participation rates in school extracurricular activity programs (overall, athletic and non-athletic). The results of the study provide support for the notion that participation in extracurricular activities is beneficial for student and school success. The results also raise points that should be addressed by further research.

Examination of Research Questions One, Two and Three found a positive relationship between the participation rate in extracurricular activity programs (overall, athletic and non-athletic) and the variables of academic achievement and attendance. As the participation rate in extracurricular activity programs (overall, athletic and non-athletic) increases, academic achievement and attendance rate increase. Additionally the data suggested a negative relationship between the participation rate in extracurricular activity programs (overall, athletic and non-athletic) and the variables of dropouts and discipline. As the participation rate in extracurricular activity programs (overall, athletic and non-athletic) increases, the dropout rate and discipline referral rate decrease.

There was a significant relationship between the participation rate in non-athletic extracurricular activities and percentage of students taking advanced courses. There were no relationships suggested between the participation rate in extracurricular activity

programs (overall and athletic) and the percent of students taking advanced courses. Additionally the data suggested no relationship between the participation rate in extracurricular activity programs (overall, athletic and non-athletic) and percent of students graduating under the recognized or distinguished achievement graduation plans.

The results of the study provide a number of opportunities for future research. One such avenue is an investigation of what role academic eligibility standards in Texas play in the suggested relationship between participation rates in school extracurricular activity programs (overall, athletic and non-athletic) and academic achievement. Although a generation of Texas students have played, or have not played, under the nation's most stringent No Pass No Play law, there have been few comprehensive studies to determine its real impact or its association with the apparent benefits - for both student and school success - of participation in extracurricular activities. Additionally, a longitudinal study of students (participants and non-participants) at a specific school could further develop the relationship between participation in extracurricular activities to the factors investigated in the current study.

Examination of Research Questions Four, Five and Six found a negative relationship between school size and the participation rate in school extracurricular activity programs (overall, athletic and non-athletic). As the size of the school increased, the participation rate in extracurricular activity programs (overall, athletic and non-athletic) decreased. An investigation into the reasons for non-participation is certainly appropriate. Additionally, an investigation into the differences in rates of participation in schools of different sizes could focus on the makeup of the student bodies of those

schools. For example, such a study could include a comparison of participation rates of students from various ethnic or socioeconomic backgrounds. As larger schools tend to be more diverse, information on what factors may influence a student's decision to participate or not participate in an extracurricular activity is vital. Also, a study could focus on schools with high rates of participation to identify characteristics that others could use in trying to increase participation in these important aspects of the overall school program.

Conclusion

Administrators and other school leaders today are facing increasing pressure to improve attendance rates, decrease dropout rates, decrease school discipline problems and increase student performance on standardized tests and other academic indicators. Based on the results of the current study and others preceding this one (Breithaupt, 1996; Holloway, 2000; Marsh 1992; Otto and Alwin, 1977; Picon 1978; Spady 1970) participation in extracurricular activities may be linked to all of these goals.

Appendix

Participation Numbers Questionnaire

Student Participation in School
Extracurricular Activity Program Questionnaire

This survey is designed to determine the number of students participating in the extracurricular activity programs (athletic and non athletic) of your school. All responses are confidential and will be reviewed only by the researcher. No identifying information of the respondent will be collected or distributed. The results will be part of a dissertation entitled The Relationship Between Student Participation Rates in Texas Public School Extracurricular Activity Programs and Related Factors of Academic Achievement, Attendance, Drop Outs and Discipline being conducted by Mark Cousins of the UIL staff.

Participation Figures

In the following section please indicate the number of participants in your schools extracurricular activity programs.

Extracurricular activity is defined as any activity reported under the programs of interscholastic competition by the Texas University Interscholastic League Constitution and Contest Rules, section 380, including cheerleading.

Total number of grade 9-12 participants in
the school overall extracurricular activity programs: _____

Non-athletic extracurricular activities include any music, academic competition and drama activities.

Total number of grade 9-12 participants in
non-athletic extracurricular activity programs: _____

Athletic extracurricular activities include volleyball, football, basketball, swimming, tennis, golf, wrestling, soccer, softball, baseball, cross country, cheerleading and track and field.

Total number of grade 9-12 participants in
athletic extracurricular activity programs: _____

PLEASE RETURN SURVEY BY FAX TO THE UIL OFFICE, TO THE ATTENTION OF MARK COUSINS BEFORE MAY 1, 2004.
FAX #: 512-471-6589 OR 512-471-5908

REFERENCES

A Nation At Risk: The Imperative for Education Reform. (1983). Washington, DC: National Commission on Excellence in Education, U.S. Department of Education.

Aristotle. Aristotle on Education. (1968). Edited by George Howie. New York, Macmillan.

Barton, William H.; Watkins, Marie. (1997). Youths and communities: Toward comprehensive strategies. Social Work. Vol. 42 Issue 5.

Bonny A. et. al. (2000). School disconnectedness: identifying adolescents at risk. Pediatrics. 106(5): 1017-1021.

Borg, W. R. & Gall, M.D. (1983). Educational Research. New York: Longman, Inc.

Botvin, G. J. (1990). Substance abuse prevention: Theory, practice, and effectiveness. In M. Tonry& J.Q. Wilson (Eds.), Drugs and crime (pp. 461–519). Chicago: University of Chicago Press.

Botvin, G. J., Schinke, S., & Orlandi, M. A. (1995). School-based health promotion: Substance abuse and sexual behavior. Applied & Preventive Psychology, 4, 167–184.

Braddock, J.H. (1980). Race, sports and social mobility: A critical Review. Sociology Symposium. 2,18-37.

Brady, B. A., Tucker, C. M., Harris, Y. R., & Tribble, I. (1992). Association of academic achievement with behavior among Black students and White students. The Journal of Educational Research, 86, 43-51.

Breithaupt, C. (1996). A study of relationship between students' perceptions and characteristics and their participation in extracurricular activities in high school. Unpublished Doctoral Dissertation, University of Texas, Austin, TX.

Brendtro, L., Brokenleg, M., & Van Bockern, S. (1990). Reclaiming youth at risk: Our hope for the future. Bloomington, IN: National Education Service.

Brooks, Barbara K. (1989). A comparison of the characteristics and perceptions of Hispanic female dropouts and persisters. Dissertation. Northern Arizona

University.

Brooks, K., Schiraldi, V., & Ziedenberg, J. (2000). Schoolhouse hype: Two years later. Washington, DC: Justice Policy Center/Children's Law Center.

Burnett, Michael (2001). One strike and you're out: An analysis of No Pass/No Play Policies. High School Journal, Vol. 84 Issue 2.

Cairns, Robert B.; Cairns, Beverley D.; Neckerman, Holly J. (1998). Early School Dropout: Configurations and Determinants. Child Development. Vol. 60 Issue 6.

Catalano, R. et. al. (1998). Comprehensive community- and school-based interventions to prevent antisocial behavior. In R. Loeber&D.P. Farrington (Eds.), Serious & violent juvenile offenders: Risk factors and successful interventions (pp. 248–283). Thousand Oaks, CA: Sage.

Carnegie Corporation. (1996). The Role of Sports in Youth Development. (March).

Christensen, D. D. (1984). Managing student activities. NASSP Bulletin 79 (512) (October): 72.

Clarkson, Philip C. (2002). Teaching/Learning: Finding new ways to meaning. Educational Studies in Mathematics. Vol. 51 Issue 3.

Coleman, J. (1961). The adolescent society. New York: Free Press.

Coleman, J. (1966). Equality of educational opportunity. Washington: United States Department of Health, Education, and Welfare.

Cooney, Sondra, Moore, Barbara, Bottoms, Gene. (2002). Gaps to close to prep them for high school. Education Digest. Vol. 67, Issue 8.

Curran, T. J. (1983). Characteristics of effective schools. NASSP Bulletin 67 (465) (October): 72.

DeVoe, J et. al. (2003). Indicators of School Crime and Safety: 2003. NCES 2004–004/NCJ 201257. U.S. Departments of Education and Justice. Washington, DC.

Department of Health and Human Services. (1995). Adolescent time use, risky behavior, and outcomes: An analysis of national data. (September).

Dryfoos, J. G. (1990). Adolescents at risk: Prevalence and prevention. NewYork: Oxford University Press.

Durlak, J. A. (1995). School-based prevention programs for children and adolescents. Thousand Oaks, CA: Sage.

Ekstrom, R. et. al. (1986). Who drops out of high school and why?: Findings from a national study. Teachers College Record, 87, 357–73.

Ennett, S. et. al. (1994). How effective is drug abuse resistance education? A meta-analysis of project DARE outcome evaluation. American Journal of Public Health, 84, 1394–1401.

Eisenberg, Marla E., Neumark-Sztainer, Dianne, Perry, Cheryl L. (2003) Peer Harassment, School Connectedness, and Academic Achievement. Journal of School Health. Vol. 73, Issue 8.

Elliott, D.S., Hamburg, B.A., and Williams, K.R. (1998). Violence in American Schools: An Overview. In Elliott, D.S., Hamburg, B.A., and Williams, K.R. (Eds.), Violence in American Schools (pp. 3–28). New York: Cambridge University Press.

Finn, J.D. (1989). Withdrawing from school. Review of Educational Research, 59, 117–142.

Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. Journal of Applied Psychology, 82(2), 221-234.

Frank, E. S. (1983). A study of participation in student activities in northwestern Ohio suburban secondary schools. Dissertation. University of Toledo.

Fretwell, M. (1931). Extracurricular activities in secondary schools. Boston: Houghton Mifflin.

Frith, G.H. and Clark, R. (1984). Extracurricular activities: Academic incentives or nonessential functions? The Clearinghouse. 57, 325-327.

Fullan, M. and Hargreaves, A. (1996). What's worth fighting for in your school? New York: Teachers College Press.

Fullan, M., and Stiegelbauer, S. (1991). The new meaning of educational change. New York: Teachers College Press.

Garbarino, J. (1978). The role of schools in socialization to adulthood. Educational Forum 40: 177.

Gerstein, D. R., and Green, L. W. (Eds.). (1993). Preventing drug abuse: What do we know? Washington, DC: National Academy Press.

Gholson, R. E. (1979). Extracurricular activities: Different perceptions but strong support. Phi Delta Kappan 61 (September): 67.

Gottfredson, Gary D. Gottfredson, Denise C. (2000) What schools do to prevent problem behavior and promote safe environments. Journal of Educational and Psychological Consultation. 12(4), 313–344

Gottfredson, D. C. (1997). School-based crime prevention. In L. W. Sherman, D. C. Gottfredson, D. MacKenzie, J. Eck, P. Reuter, & S. Bushway (Eds.), Preventing crime: What works, what doesn't, what's promising: A report to the United States Congress (pp. 5-1–5-7). Washington, DC: U.S. Department of Justice, Office of Justice Programs.

Gottfredson, D. C. (2001). Delinquency prevention in schools. New York: Cambridge University Press.

Gottfredson, D. C., Wilson, D. B., & Najaka, S. S. (in press) (1999). School-based crime prevention. In D. P. Farrington, L. W. Sherman, & B. Welsh (Eds.), Evidence-based crime prevention. United Kingdom: Routledge.

Green, J. (1987). The next wave: A synopsis of recent education reform reports. Education Commission of the States, Denver.

Greer, M. (1975). The human element in extracurricular activities. The Delta Kappa Gamma Bulletin 41: 40-43.

Hallfors, D. et. al. (2002). Truancy, grade point average, and sexual activity: a meta-analysis of risk indicators for youth substance use. Journal of School Health. Vol. 72 Issue 5, p205, 7p.

Hanks, M. P. & Eckland, B. (1976). Athletics and social participation in the educational attainment process. Sociology of Education 49 (October): 273.

Hansen, W. B. (1992). School-based substance abuse prevention: a review of the state of the art in curriculum: 1980-1990. Health Education Research, 7, 403–430.

Hansen, W. B., and O'Malley, P. M. (1996). Drug use. In R. J. DiClemente, W. B. Hansen, & L. E. Ponton (Eds.), Handbook of adolescent health risk behavior (pp.161–192). NewYork: Plenum.

Hawkins, J. D., Arthur, M. W., and Catalano, R. F. (1995). Preventing substance abuse.

In M. Tonry & D. Farrington (Eds.), Building a safer society: Strategic approaches to crime prevention (pp. 343–427). Chicago: University of Chicago Press.

Hawkins, J. D., Farrington, D. P., & Catalano, R. F. (1998). Reducing violence through the schools. In D. S. Elliott, B. A. Hamburg, and K. R. Williams (Eds.), Violence in American schools (pp.188–216). New York: Cambridge University Press.

Henley, M., Ramsey, R., & Algozzine, R. (1999). Teaching students with mild disabilities (3rd ed.). Boston: Allyn & Bacon.

Holloway, J. H. (2000). Extracurricular activities: The path to academic success. Educational Leadership, 57(4), 87-88.

House Bill 72 (1984). Texas State Legislature. (Austin, Texas: State of Texas).

Hunt, M. et. al. (2002). A comprehensive needs assessment to facilitate prevention of school drop out and violence. Psychology in the Schools, Vol. 39(4).

Inside School Safety. (2003). Program brings dramatic drop in discipline problems. Vol. 8 Issue 5.

Inside School Safety. (2001). Which safety programs work and which don't? Vol. 6 Issue 1.

Institute of Medicine. (1994). Reducing risks for mental disorders: Frontiers for preventive intervention research. Washington, DC: National Academy Press.

Jeziorski, Ronald. (1994). The importance of school sports in American education and socialization. University Press of America: Lanham, Maryland.

Joekel, R. G. (1985). Student activities and academic eligibility requirements. NASSP Bulletin 69 (483) (October): 3.

Johnston, E. G. (1952). Critical problems in the administration of student activities. NASSP Bulletin 36 (1984) (February) :1.

Jurenas, A.C. (1987). No pass, no play: An issue that won't go away. American Secondary Education, 15 (4), 29-30.

Kelley, E. et. al. (1986). School climate survey. Comprehensive Assessment of School Environments. Reston, VA: National Association of Secondary School Principals.

Kilzer, L. R., Stephenson, H. H. and Nordberg, H. O. (1956). Allied activities in the

secondary schools. New York: Harper & Brothers.

Lee, Mabel (1983). A history of physical education and sports in the USA. John Wiley and Sons, New York.

Ligon, G. (1988). No pass/no play: Impact of failures, dropouts and course enrollments (Publication No. 87.58). Austin, TX: Austin Independent School District, Office of Research and Evaluation.

Lipsey, M. W. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In T. D. Cook, H. Cooper, D. S. Cordray, H. Hartmann, L. V. Hedges, R. J. Light, T. A. Louis, and F. Mosteller (Eds.), Meta-analysis for explanation (pp. 83–127). New York: Russell Sage Foundation.

Lipsey, M.and Derzon, J. H. (1998). Predictors of violent and serious delinquency in adolescence and early adulthood: a synthesis of longitudinal research. In R. Loeber.&D. P. Farrington, (Eds.), Serious & violent juvenile offenders: Risk factors and successful interventions (pp. 86–105). Thousand Oaks, CA: Sage.

Lipsey, M. W., and Wilson, D. B. (1993). The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. American Psychologist, 48, 1181–1209.

Locke, John (1902). Some thoughts concerning education. London: Cambridge University Press.

Long, R., Buser, R. and Jackson, M. (1977). Student Activities in the Seventies. Reston, VA: National Association of Secondary School Principals.

Lutz, Alma (1929). Emma Willard, Daughter of Democracy. Houghton Mifflin, New York.

Ma, Xin. (2003). Sense of belonging to school: can schools make a difference? The Journal of Education Research. Vol. 96, Number 6.

Marsh, H. (1992). Extracurricular activities: beneficial extension of the traditional curriculum of subversion of academic goals? Journal of Educational Psychology, 84(4), 553-562.

McCall, Rona J. (1994). A mini-longitudinal study of truancy and school drop out. Dissertation. The University of North Carolina at Chapel Hill.

McCurdy, Barry L.; Mannella, Mark C.; Eldridge, Norris. (2003). Positive behavior support in urban schools: can we prevent the escalation of antisocial

behavior? Journal of Positive Behavior Interventions. Vol. 5 Issue 3.

McKenzie, R. Tait (1936). Benjamin Franklin-Illustrious pioneer in physical education, Journal of Health and Physical Education, vol. 7.

McNeely, C. et. al. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. Journal of School Health. Vol. 72 Issue 4, p138, 9p.

Meier, Kenneth et. al. (1999) A question of priorities: Athletic budgets and academic performance. Texas Educational Excellence Project. Dec.

Miracle, Andrew Jr.; Rees, C. Roger. (1994). Lessons of the locker Room, The myth of school sports. Prometheus Books: Amherst, New York.

National Association of State Boards of Education (NASBE). (1999, June). No pass no play: eligibility requirements for extracurricular activities. Policy Update. Vol. 7, Number 12.

National Commission on Excellence in Education (1983). A Nation at Risk. (Washington, D.C: US Government Printing Office).

National Education Association. (1919). The cardinal principles of secondary education.

National Federation of State High School Associations (NFHS). (1999). The Case for High School Activities.

Nichols, Joe D. (2003). Prediction Indicators for Students Failing the State of Indiana High School Graduation Exam. Preventing School Failure. Vol. 47, Issue 3.

Norman, E., & Turner, S. (1993). Adolescent substance abuse prevention programs: Theories, models, and research in the encouraging 80's. The Journal of Primary Prevention, 14, 3–20.

O'Keefe, Joseph M.. (1993). Students in Catholic schools perform better; Here's why. National Catholic Reporter. Vol. 30 Issue 2, p19, 3/8p.

O'Reilly, J.M. (1992). Did the kids win or lose? The impact of no pass no play rule on student achievement (Publication Number TR 53). Mesa, AZ: Mesa Public Schools, Office of Research and Evaluation.

Otto, L. B. and Alwin, D. (1977). Athletics, aspirations, and attainments. Sociology of Education 50: 102-113.

Pedhauzer, Elazar, and Pedhauzer Schmelkin, Liora. (1991). Measurement, Design and Analysis: An Integrated Approach. Lawrence Erlbaum Associates Inc. New Jersey.

Peterson, R.; Skiba, R. (2001). Creating school climates that prevent school violence. Social Studies. Vol. 92 Issue 4, p167, 9p.

Picon, J. S. (1978). Race, athletics, attainment, and educational aspirations. The Sociological Quarterly, 19, 429-438.

Powell, Cecil L., Jacob Arriola, Kimberly R. (2003). Relationship between psychosocial factors and academic achievement among african american students. Journal of Educational Research. Vol. 96, Issue 3.

Quick, R.H. (1912). Essays on educational reform. D. Appleton, New York.

Reid, Ken. (1999). Truancy and schools. London; New York: Routledge.

Reid, Ken. (2003) Strategic approaches to tackling school absenteeism and truancy: the traffic lights. Educational Review, Vol. 55, No. 3.

Resnick M.; Bearman P; Blum R. et al. (1997). Protecting adolescents from harm: findings from the National Longitudinal Study on Adolescent Health. Journal of the American Medical Association. 278(10):823-832.

Robbins, J. H. and Williams, S. B., Jr. (1969). Student activities in the innovative school. Minneapolis: Burgess Publishing.

Rubin, A. & Babbie, E. (1993). Research methods for social work. Pacific Grove, CA: Brooks Cole Publishing.

Samples, F., & Aber, L. (1998). Evaluations of school-based violence prevention programs. In D. S. Elliott, B. A. Hamburg, & K. R. Williams (Eds.), Violence in American schools (pp. 217–252). New York: Cambridge University Press.

Sargent, Dudley (1927). Autobiography. Lea and Febiger, Philadelphia.

Schulenberg, J. et. al. (1994). High-school educational success and subsequent substance use -- a panel analysis following adolescents into young adulthood. Journal of Health and Social Behavior. 35(1):45-62.

Select Committee on Public Education (1984). Recommendations. (State of Texas).

Silberman, C. E. (1970). Crisis in the classroom: The remaking of American education.

Random House: New York.

Sinclair, Mary F.; Christenson, Sandra L. (1998). Dropout prevention for youth with disabilities: Efficacy of a sustained school engagement procedure. Exceptional Children. Vol. 65 Issue 1.

Skiba, R. J., and Knesting, K. (2002). Zero tolerance, zero evidence: An analysis of school disciplinary practice. In R. J. Skiba & G. G. Noam (Eds.), New directions f for youth development (no. 92: Zero tolerance: Can suspension and expulsion keep schools safe?) (pp. 17–43). San Francisco: Jossey-Bass.

Skiba, Russell and Peterson, Reece. (2003). Teaching the social curriculum: school discipline as instruction. Preventing School Failure. Winter 2003.

Smith, F. R. and McQuigg, R. B. (1965). Secondary schools today. J.R. Mitchell, ed. Boston: Houghton Mifflin.

Spady, W. G. (1970). Lament for the letterman: Effects of peer status and extracurricular activities on goals and achievements. American Journal of Sociology 75 (4): 681.

Spears, H. (1950). The high school for today. New York: American Book Company.

Stage, S. A., and Quiroz, D. R. (1997). A meta-analysis of interventions to decrease disruptive classroom behavior in public education settings. School Psychology Review, 26, 333–368.

Stevenson, C. L. (1975). Socialization effects of participation in sport: A critical review of the research. Research Quarterly 46 (3) (October): 299.

Taylor-Seehafer M, Rew L. (2000). Risky sexual behavior among adolescent women. Journal of the Society of Pediatric Nursing. 2000;5(1): 15-25.

Tobler, N. S. (1992). Drug prevention programs can work: Research findings. Journal of Addictive Diseases, 11(3), 1–28.

Tobler, N. S., and Stratton, H. H. (1997). Effectiveness of school-based drug prevention programs: A meta-analysis of the research. Journal of Primary Prevention, 18, 71–128.

Tremblay, R. E,. and Craig, W. M. (1995). Developmental crime prevention. In M. Tonry & D. P. Farrington (Eds.), Building a safer society: Strategic approaches to crime prevention (pp.151–236). Chicago, IL: University of Chicago Press.

Tuckman, B. W. (1988). Conducting educational research. New York: Harcourt Brace

Jovanovich.

U.S. Department of Education (USDOE). (2003). National Center for Education Statistics. Public high school dropouts and completers from the common core of data: School year 2000–01. NCES 2004–310, by Beth Aronstamm Young. Washington, DC: 2003.

Viadero, Debra. (2003). Academic achievement. Education Week. Vol. 23, Issue 7.

Welsh, Wayne. (2001). School disorder. Justice Quarterly, Vol. 18 No. 4 December.

Wentzel, K. R. (1989). Adolescent classroom goals, standards for performance, and academic achievement: An interactionist perspective. Journal of Educational Psychology, 81(2), 131-142.

Wirt, J. et. al. (2002). The condition of education. National Center for Education Statistics. U.S. Department of Education Office of Educational Research and Improvement.

Wu, S. C. et. al. (1982). Student suspension: A critical reappraisal. The Urban Review, 14, 245–303.

Vita

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